

Validation Report

VALIDATION OF THE CDM-PoA:
COMPOSTING AND CO-COMPOSTING PROGRAMME
OF ACTIVITIES (POA) IN INDONESIA

Report No. 1431471

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TÜV SÜD Industrie Service GmbH

Carbon Management Service Westendstr. 199 - 80686 Munich – GERMANY



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Accredited TÜV SÜD Unit:	TÜV SÜD Contract Partner:		
TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 80686 Munich Germany	TÜV SÜD Industrie Service GmbH Carbon Management Service Westendstr. 199 80686 Munich Germany		
Project Participants:			
Client: South Pole Carbon Asset Management Ltd. zerland	, Technoparkstrasse 1, Zurich, CH_8005, Swit-		
Other Participants:			
PT. Composting Program International (PT.CPI) (Number 2014) Menara BCA, Grand Indonesia, Jakarta, DKI Jakar			
PoA Title: Composting and Co-composting Program	nme of Activities (PoA) in Indonesia		
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Assessment Team Leader:	Technical Reviewer:		
Nikunj Agarwal	Cathy Wu		
Assessment Team Members:	Responsible Certification Body Members:		
Praveen Pyata, Bratin Roy	Thomas Kleiser		
Stephan Hild, Praveen Tekchandani			
Summary of the PoA Validation Opinion:			
provided TÜV SÜD with sufficient eviden stated criteria. In our opinion, the PoA me	ntation and the subsequent follow-up interviews have be for the determination of the PoA's fulfilment of all eets all relevant UNFCCC requirements for the CDM. If or registration by the CDM Executive Board.		
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ABBREVIATIONS

AMS Approved Methodology Small scale

CAR Corrective Action Request

CDM Clean Development Mechanism

CDM EB CDM Executive Board

CER Certified Emission Reduction

CMP Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol

CPA CDM Programme activity

CPA-DD CDM Programme Activity Design Document

CR / CL Clarification Request

DNA Designated National AuthorityDOE Designated Operational Entity

EF Emission Factor

EIA / EA Environmental Impact Assessment / Environmental Assessment

ER Emission Reduction

FAR Forward Action Request
GHG GreenHouse Gas(es)

IPCC Intergovernmental Panel on Climate Change

IRL Information Reference List

KP Kyoto ProtocolMP Monitoring Plan

PDD Project Design Document
PoA Programme of Activities

PoA-DD Programme of activities design document

PP Partner Organisation
PP Project Participant

TÜV SÜD Industrie Service GmbH

UNFCCC United Nations Framework Convention on Climate Change

VVM Validation and Verification Manual



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1 INTRODUCTION

1.1 Objective

The objective of the validation process is to provide an independent assessment by a third party, a Designated Operational Entity (DOE), of the proposed Programme of Activities (PoA) and the CDM Programme Activity (CPA) template with generic information applicable to all CPAs under that PoA and the associated real case CPA-DD.

The assessment involves the evaluation of the PoA basis and design identified in the PoA Design Document (PoA-DD), template CPA design document (CPA-DD) and the associated real case CPA-DD using the defined criteria outlined by the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and results in a conclusion by the executing DOE on whether or not a PoA is valid to be submitted for registration to the CDM Executive Board (CDM-EB). The ultimate decision on the registration of a proposed PoA rests with the CDM-EB and the Parties involved.

The PoA addressed in this validation report has been submitted under the following title:

Composting and Co-composting Programme of Activities (PoA) in Indonesia

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM PoA, the scope is set by:

- > The Kyoto Protocol, in particular § 12 and modalities and procedures for the CDM
- ➤ Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the CDM (e.g. decisions 4 8/CMP.1)
- Decisions and specific guidance outlined by the EB which are published under http://cdm.unfccc.int
- Guidelines for Completing the PoA Design Document (PoA-PDD), CDM programme of activities template and design document (CPA-DD) and the applied CDM methodology including the sections especially dedicated to PoA
- Management systems and auditing methods
- > Environmental issues relevant to the applicable sectoral scope
- Applicable environmental and social impacts and aspects of CDM project activity
- > Sector specific technologies and their applications
- Current technical and operational knowledge of the specific sectoral scope and information on best practice

The validation process is not meant to provide any form of consulting for the PoA Managing Entity, CPA Implementer(s) and/or project participant(s) (PP). However, stated requests for clarifications, corrective actions, and/or forward actions may provide input for improvement of the project design.

Once TÜV SÜD receives the PoA-DD, Generic CPA-DD and completed CPA-DD of the real case, it is made publicly available on the UNFCCC website and on TÜV SÜD's website, which initiates a 30 day global stakeholder consultation process (GSP). In special circumstances, such as when a PoA

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design changes, the GSP may need to be repeated. Information on the PoA-DD is presented on page 1 of this report.

The purpose of validation is to demonstrate compliance or non-compliance of the PoA with all stated and valid UNFCCC and host party requirements. Additionally, the purpose of validation is to enable the registration of PoA, which is only a part of the total CDM project cycle.

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2 VALIDATION METHODOLOGY

The PoA assessment is based on the "Clean Development Mechanism Validation and Verification Manual" version 1.2 and is conducted using standard auditing techniques to assess the correctness of the information provided by the project participants. Before the assessment begins, members of the team covering the technical scope(s), sectoral scope(s), and relevant host country experience for evaluating the CDM PoA are appointed. Once the PoA documents are made available for the stakeholder consultation process, members of the team carry out the desk review, follow-up actions, resolution of issues identified, and the preparation of the validation report. The prepared validation report and other supporting documents then undergo an internal quality control by the CB "Climate and Energy" before being submitted to the CDM-EB.

In order to ensure transparency, assumptions must be clear and stated explicitly and background material must also be referenced. TÜV SÜD has developed a methodology-specific protocol customized for the PoA. The protocol demonstrates, in a transparent manner, the PoA criteria (requirements), discussion on each criterion by the assessment team, and the results from validating the identified criteria.

The validation protocol serves the following purposes:

- To organize the details and provision of clarifications on the requirements of which a CDM-PoA and its CPA-DD are expected to meet; and
- To elucidate how a particular requirement has been validated as well as to document the results of the validation and any adjustments made to the PoA-DD.

The validation protocol consists of three tables. The different columns in these tables are described in the tables below.

Validation Protoc	ol Table 1: Con	formity of CDM Prog	ramme of Activities	
Checklist Topic / Question	Reference	Comments	GSP	Final
The checklist is organised in sections following the arrangement of the applied PoA-DD version. Each section is then subdivided. The lowest level constitutes a checklist question / criterion.	The section gives reference to documents in which the answer to the checklist question or item is found in case the comment refers to documents other than the PoA-DD.	The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is used to explain the conclusions reached. In some cases subchecklists are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column.	The section is used to present conclusions based on the assessment of the first PoA-DD version. The PoA-DD is either acceptable based on evidence provided (🗹) or a Corrective Action Request (CAR) is issued due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification. Forward Action Request is issued to highlight issues related to project implementation that require review during the first verification.	Conclusions are presented in the same manner based on the assessment of the final PoA-DD version and further documents including assumptions presented in the documentation.



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Validation Protocol Table 2: Resolution of Clarification and Corrective Action Requests							
Clarifications and cor- rective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion				
If the conclusions from table 1 are either a Corrective Action, a Clarification or a Forward action Request, these should be listed in this section.	the checklist question number in Table 1 where	The responses given by the managing entity and/or other project participants during the communications with the validation team should be summarised in this section.	discussion on and revision to PoA				

In case it is found that the project activity does not meet CDM requirements, more detailed information on this decision is presented in Table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests					
Clarifications and corrective action requests Id. of CAR/CR Explanation of the Conclusion for Denial					
Referenced request if final conclusions from table 2 resulted in a denial.	Identifier of the Request.	Detailed explanation of why the PoA is considered non- compliant with a criterion and a clear reference to the criterion			

The completed validation protocol is enclosed in Annex 1.

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment, TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body "Climate and Energy".

The composition of an assessment team has to be approved by the Certification Body (CB) to assure that the required skills are covered by the team. The CB TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Validator (V)
- Validator Trainee (T)
- Technical Expert (TE)

It is required that the sectoral scope(s) and the technical area(s) linked to the methodology and project have to be covered by the assessment team.

Assessment team:

Name	Qualifi- cation	Coverage of sectoral scope	Coverage of technical area	Coverage of financial aspect	Host country experience
Nikunj Agarwal	ATL	\square	\square	\square	V
Praveen Pyata	V	☑	\square	-	V
Bratin Roy	V	Ø	Ø	Ø	V
Stephan Hild					
Praveen Teckchandani	Т				



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Technical Reviewer:

Cathy Wu

2.2 Review of Documents

The PoA-DD and completed CPA-DD for the GSP was submitted to the DOE in December 2009. The PoA-DD and additional background documents related to the PoA design and baseline have been reviewed to verify the correctness, credibility, and interpretation of the presented information. Furthermore, a cross-check between information provided and information from other sources has been done as an initial step of the validation process. A complete list of all documents and evidence material reviewed is attached as Annex 2 to this report.

2.3 Follow-up Interviews

During the period 15-02-2010 to 19-02-2010, TÜV SÜD performed interviews and physical site inspections with project stakeholders to confirm relevant information, and to resolve issues identified in the document review. The following table provides a list of all key persons interviewed in this process.

Name	Organisation
Paul Butarbutar	PT. Composting Program International (PT.CPI)
Francois Beaurain	South Pole Carbon Asset Management Ltd.
Henricus Hutabarat	South Pole Carbon Asset Management Ltd.
Alin Pratidina	PT. Composting Program International (PT.CPI)
Pardamean Siahaan	PT Fetty Mina Jaya

2.4 Cross-check

During the validation process the team has made reference to available information related to similar projects or technologies as the CDM PoA. Project documentation has also been reviewed against the approved methodology applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions, clarifications, and any other outstanding issues which need to be clarified for TÜV SÜD's conclusion on the PoA design. The CARs and CRs raised by TÜV SÜD are resolved during communication between the managing entity and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are documented in more detail in the validation protocol in Annex 1.

The final PoA-DD version-04 that was submitted in August 2011 serves as the basis for the final assessment presented herewith. Additional changes to the project during the validation process are not considered to be significant with respect to the main CDM objectives. The two CDM main objectives are the reduction of anthropogenic GHG emissions and the contribution of sustainable development to the host country.



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2.6 Internal Quality Control

Internal quality control is the final step of the validation process and is conducted by the CB "Climate and Energy" who checks the final documentation, which includes the validation report and annexes. The completion of the quality control indicates that each report submitted has been approved either by the head of the CB or the deputy. In projects where either the Head of the CB or the deputy is part of the assessment team, the approval is given by the one not serving on the project team.

After confirmation by the Managing Entity and/ or CPA Implementer(s) and/ or PP, the validation opinion and relevant documents are submitted to the EB through the UNFCCC web-platform.



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3 SUMMARY

The assessment work and the main results are described below in accordance with the VVM reporting requirements. The reference documents indicated in this section and Annex 1 are stated in Annex 2 of this report.

3.1 Approval

The project participant and managing entity of the PoA is PT. Composting Program International (PT.CPI) of Indonesia. The other project participant is South Pole Carbon Asset Management Ltd. of Switzerland. Both the host party Indonesia and Switzerland meet the requirements to participate in the CDM PoA. The involved parties meet the requirements to participate in the CDM.

The Indonesian DNA has issued a letter of approval (LoA) dated 26 March 2010 authorizing PT. Composting Program International (PT.CPI) as a project participant and as the coordinating and managing entity [26]. The Switzerland DNA has also issued a LoA, dated 24 June 2010, authorizing South Pole Carbon Asset Management Ltd. as a project participant [27]. TÜV SÜD received the letters from the project participants directly and considers the provided letters as authentic.

Furthermore, after checking the provided LoA's, TÜV SÜD confirms that the letters refer to the precise proposed PoA title in line with the title in the PoA-DD: Composting and Co-composting Programme of Activities (PoA) in Indonesia.

The letters also indicates that the participating Parties are Party to the Kyoto Protocol, and that the participation in the PoA is voluntary. The Indonesian LoA also confirms that the proposed PoA contributes to the sustainable development of Indonesia (host country). Based on the information given in the letter, TÜV SÜD considers the approval as unconditional with respect to these items.

The LoAs have been issued by the respective Party's DNA - National Committee on CDM, Government of Indonesia and Federal Department of the Environment, Transport, Energy and Communications, Switzerland, and does not refer to a specific version of the PoA-DD or validation report.

TÜV SÜD considers that the requirements of VVM (§§ 45-48) have been met.

3.2 Participation

The participants of the project activity have been approved by the corresponding Parties, which is confirmed by the issued LoAs.

The means of validation used are similar to the ones described in Section 3.1, specifically in regard to the approval process of the project activity.

3.3 Programme of Activities Design Documents

The PoA-DD and the Generic CPA-DD are in compliance with relevant form and guidance as provided by UNFCCC. The most recent version of the forms is used.

TÜV SÜD considers that the guidelines for the completion of the PoA documents in their most recent version have been followed. Relevant information was provided by the Managing entity and/ or project participants in the applicable PoA sections. Completeness was assessed through the protocol included in Annex 1.

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3.4 Programme Description

The following description of the programme as per PoA-DD was verified:

The PoA involves implemenation of waste management measure in Palm Oil Mills of Indonesia under each CPA. The measure consists of co-treating of Palm Oil Mill Effluent (POME) and Empty Fruit Bunch (EFB) waste using aerobic "co-composting" process. The POME would otherwise have been treated in an anaerobic wastewater treatment system without biogas recovery while the EFB would have otherwise been left to decay anaerobically in a solid waste disposal site (SWDS). Methane emissions occured due to the earlier method of handling POME and EFB in anaerobic lagoons and SWDS respectively, this is in the absence of project activity. Both the anaerobic lagoons and SWDS are situated in the oil palm plantation area. However it can also be noted that the PP's still keep open the option of not adding POME to EFB at some Palm Oil Mills of Indonesia where the PoA will be implemented. Such a process at those CPA's will be called "composting". The compost produced out of each CPA will be used in the neighboring plantation or sold out in the market. In both the cases compost is disposed in aerobic conditions for soil application therefore it also contributes to reduce the mineral fertilizer consumption eventually.

While implementing the project activity the PP's propose to use various existing efficient aerobic composting technologies and its variants comprising of 1) Non-Reactor Systems 2) Enclosed Reactor Systems and 3) In-Vessel Reactor Systems. In general the "co-composting" or "composting" facility at each CPA comprises several steps of a sequential processes equipped with necessary monitoring systems.

PT. Composting Program International (PT.CPI) will be the coordinating and managing entity of the PoA. The CDM programme activities (CPAs) under the PoA will be implemented in Indonesia where there are no mandatory policies or regulations that prevent disposal of POME and EFB in anaerobic lagoons and SWDS respectively. The proposed PoA is a voluntary action by the coordinating/managing entity – PT.CPI.

The individual CPA will be implemented at the Palm Oil Mill and there will be no diversion of ODA to finance the project. The starting date of the PoA is 9th June 2008 based on the date when the South Pole board decision to undertake a composting PoA in Indonesia was made [20]. The validation of PoA started before 31st December 2009 therefore the CPA's with start dates between 22nd June 2007 and commencement of validation of PoA, will also be included in the programme as CPA's (Report of EB 47, paragraph 72). Accordingly a list of such specific CPAs has been provided to validating DOE and UNFCCC secretariat prior to 31/01/2010. The expected operational lifetime of the PoA is considered to be 28 years.

The information presented in the PoA documents on the technical design is consistent with the actual planning and implementation of the project activity confirmed in the following ways:

- A review of data and information (see annex 2);
- An on-site visit to the place where the associated real case CPA is being implemented and interview with relevant stakeholder and personnel with knowledge of the project in attendance; and
- A review of information related to similar projects or technologies which have been used to validate the accuracy and completeness of the project description.

In conclusion, TÜV SÜD confirms that the PoA project description, as included in the PoA-DD, is sufficiently accurate and complete in order to comply with the requirements of the CDM and therefore in compliance with VVM para. 58-64.

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3.5 Eligibility Criteria for CPA Inclusion

The managing entity employs clear and unambiguous criteria for the inclusion of the CPA. The eligibility criteria's have been stated and are verifiable with regards to the applicability of the applied methodology AMS III.F/ version 08 including the following:

- 1. All CPA's shall be located in Indonesia
- 2. No composting or co-composting activity took place before at the CPA location
- 3. The requirements including applicability criteria of AMS-III.F version 8, will be met
- 4. CPA implementer (CPA owner) signed agreement with PT.CPI (CME) prior to inclusion, also including ceding of carbon credit rights to CME
- 5. SWDS shall has a capacity to accommodate EFB for the crediting period
- 6. Prior to implementation POME is earlier treated in anaerobic lagoons without biogas recovery
- 7. No other material except EFB & POME will be composted in CPA
- 8. There is no regulation in Indonesia that prevents use of SWDS for disposal of EFB and anaerobic lagoons treating POME, at the time of CPA inclusion.
- 9. Final product of composting or co-composting will be disposed aerobically
- 10. Source of the raw material for composting will be the adjacent palm oil mill and source will be no farther than 200 km from CPA location in any case.
- 11. CPA complies with all (updated) laws and regulations of Indonesia
- 12. No double counting occurs due to being part of another registered CDM project, bundled CDM project or another POA,
- 13. Applicability of EB 54 Annex 13 "Guidelines on assessment of debundling for SSC project activities" will be demonstrated.
- 14. Additionally includes each of the applicability criteria as part of AMS. III.F, version 08.

The above eligibility criteria can be checked at the CPA level by the managing entity and can be confirmed by the DOE during inclusion.

3.6 Operational and Management Plan

A clear and transparent description of the operational and management arrangement has been established by the PT.CPI and stated in the PoA-DD. This has been verified during site audit from the following:

- 1. Termsheet between Fetty Mina Jaya and South Pole [29]
- 2. ERPA [28]
- 3. Record keeping system to avoid double counting, de-bundling[23]

The Termsheet and ERPA for CPA will ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA. The record keeping system for each CPA under the PoA will identify each composting facility under a serial numbering system to uniquely identify each location in addition to its technical details, address and GPS co-ordinates.

The system to avoid double counting has been described in the PoA-DD and the concerned database has been validated by the audit team to be sufficient. For this the CME would be screening



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every new CPA to ensure that no double-counting occurs. Also, as each CPA will have a unique title in host country, thus it can be checked whether a CPA under the PoA already is a registered CDM project or CPA in another PoA from the UNFCCC website.

As per EB 54, annex 13- Guidelines on Assessment of De-bundling for SSC Project Activities the de-bundling check will be performed for every CPA.

3.7 Monitoring Plan

The PPs have opted for a sampling approach as informed in paragraph 6 (k) of EB 55 annex 38. Sampling approach includes stratified random sample methodology described "General Guidelines for sampling and surveys for small scale CDM project activities", EB50 annex 30. Precision and level of confidence will be done according to the 90/10 principle. As per the POA-DD the coordinating entity will implement a sampling procedure to be used by the DOE during verification. However the coordinating entity kept open the option to verify individually some CPAs. The criteria used to identify individual verification of a particular CPA will be that- how critical was the implementation of the monitoring plan for a particular CPA during its monitoring period as for instance the first verification of a CPA. It can be noted that the sampling approach described by PP is acceptable at POA validation and is valid only until the EB has developed and approved a "guideline containing criteria for determining statistically sound verification techniques and methods" (refer footnote 2 of EB 55 annex 38).

The sampling method/procedure described in the PoA-DD has been validated. A stratified random sample methodology will be adopted wherein for each stratum a sample will be determined considering the following attributes- GHG types, sources, sinks, reservoirs, projects and processes and organization, facilities and sites. An analysis of these attributes specific to Indonesian conditions clearly indicate the differences between composting and co-composting projects based on calculation approach for PE and BE. In addition monitoring plan and GHG process also differ significantly for composting and co-composting projects thus favoring two strata approach for sampling procedure. Eventually the two strata consist of stratum-1 containing composting project group and stratum-2 containing co-composting project group.

In general the monitoring plan provides a transparent system to ensure that no double accounting occurs and that the status of verification can be determined any time for each CPA. The system to avoid double counting has been indicated in the PoA-DD. This would be done by PT.CPI through review of information available from CPA owners/implementers and UNFCCC. Also, as each CPA will have a unique title and the unique serial number it is ensured that the double counting is avoided.

The description provided in the PoA-DD on the operational and management arrangements were confirmed based on document review and on-site interviews.

3.8 Baseline and Monitoring Methodology

3.8.1 Applicability of the selected methodology

Compliance with each applicability condition as listed in the chosen baseline and monitoring methodology AMS-III.F / Version 08 – 'Avoidance of methane emissions through controlled biological treatment of biomass' has been demonstrated in PoA DD section E.2.

The assessment was carried out for each applicability criterion and included, among other checks, a compliance check of the PoA with the applicability conditions in regard to baseline setting and eligible project measures. This assessment also included the review of secondary sources to demonstrate the compliance with applicability conditions.



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The methodology-specific protocol, included in Annex 1, documents the assessment process. The results of the compliance check as well as relevant evidence are detailed in the protocol and the information reference list.

- Under the PoA co-composting of POME and EFB or composting of EFB alone will take place in Palm Oil Mills of Indonesia. Methane emissions occur due the earlier method of handling POME and EFB in anaerobic lagoons and SWDS respectively at Palm Oil Mill sites [8, 10].
- The PoA will consist only of composting and co-composting activities no LFG capture and flaring or combustion activities involved [34, 35].
- Measures will cause emission reductions of less than or equal to 60 kt CO₂e annually per CPA.
- No other wastes except Palm Oil Mill wastes will be involved.
- PoA will involve only the newly developed composting or co-composting facilities. At Palm Oil Mill site, no composting activity shall have been undertaken before CPA starts.
- Before inclusion each CPA will ensure prior existence of SWDS that could accommodate EFB for the whole crediting period. It shall also be checked for each CPA whether it is a common practice in the region to dispose of the waste in solid waste disposal site (landfill).
- The project participants shall clearly define the geographical boundary which will not exceed 200 km from the project activity, in any case as required by the methodology. Once defined, the region will not be changed during the crediting period.
- In the case of stockpiles of EFB or open burning or removal for other applications at a CPA, the baseline emission calculations as described in the "Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site" version 5.01 and AMS-III.E will be adjusted.
- Final products of composting and co-composting will be handled aerobically and submitted to soil application, the proper conditions and procedures (not resulting in methane emissions) will be ensured.
- All records would be screened by CME. The records will also be cross checked with PO reports and logistics record which will confirm that the records are authentic and no double counting has occurred.

TÜV SÜD confirms that the chosen baseline and monitoring methodology is applicable to the PoA.

Emission sources, not addressed by the applied methodology and expected to contribute more than 1% of the overall expected average annual emission reductions, have not been identified.

3.8.2 CPA boundary

The CPA boundary was assessed considering information gathered from the physical site inspection, interviews, and secondary evidence received on the design of the PoA.

The project boundary is the physical, geographical location of each CPA consisting of the following:

- (a) SWDS where the EFB would have been disposed causing methane emission in the absence of the CPA
- (b) Anaerobic lagoon systems where the POME would have been treated in the absence of the CPA causing methane emission in the absence of the CPA
- (c) Location where the treatment of biomass through composting takes place;
- (d) Location where the soil application of the produced compost takes place;
- (e) And the itineraries between (a), (b), (c) and (d), where the transportation of the waste, wastewater or compost occurs.



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The sources and gases within the boundary have been considered in a clear manner.

TÜV SÜD confirms that the identified boundary, the selected sources, and gases as documented in the PoA-DD are justified for the project activity and are fully in line with the requirements set by the applied methodology.

3.8.3 Baseline identification

The current PoA is a voluntary coordinated action as evident from the fact that there is no mandatory regulation which requires adoption of composting and co-composting for EFB and POME disposal in Indonesia [8, 9, 10, 15, 16, 17, 18].

Based on the on-site interviews with PT.CPI and the host country experience of the audit team it is confirmed that the current mode of disposal of EFB and POME is using SWDS and anaerobic lagoons respectively.

According to the applied methodology, in the absence of the programme, the baseline scenario would be the use of SWDS and anaerobic lagoons respectively.

The information presented in the PoA-DD has been validated by an initial document review of all data. Further confirmation has been made based on the on-site visit and a review of information from similar projects [1, 3]. The sources referenced in the PoA-DD have been quoted correctly.

TÜV SÜD has determined that no reasonable alternative scenario has been excluded.

Based on the validated assumptions used for project activity calculations, TÜV SÜD considers that the identified baseline scenario is reasonable.

Taking the definition of the baseline scenario into account, TÜV SÜD confirms that all relevant CDM requirements, including relevant and/or sectoral policies and circumstances, have been identified correctly in the project PoA-DD.

A verifiable description of the baseline scenario has been included in the PoA-DD.

TÜV SÜD confirms the following statements as per VVM paragraph 87:

- (a) All the assumptions and data used by the project participants are listed in the PoA-DD, including their references and sources;
- (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PoA-DD;
- (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence, and can be deemed reasonable;
- (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PoA-DD:
- (e) The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario, and the identified baseline scenario reasonably represents what would occur in the absence of the proposed CDM project activity.

3.9 Additionality

3.9.1 Prior consideration of the clean development mechanism

The start date of the PoA has been defined as 09th June 2008, based on the date when the board of South Pole Carbon Asset Management Ltd. took a decision to undertake a composting PoA in Indonesia [20]. As this is before 02nd August 2008 and also before the start of the GSP (22nd December



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2009) therefore, the prior and ongoing CDM consideration has been assessed as following the two approaches applicable to this POA:

Approach-1:

Consists of CPA's that started prior to 31st December 2009 and which have additionally informed the host country DNA and the UNFCCC secretariat about the commencement of the project activity and their intention to seek CDM status. This follows the early mover exemption allowed by report of EB 47 paragraph 72.

Approach-2:

Consists of CPA's that shall start later to POA validation start date (22 December 2009) and as a result do not need to demonstrate prior consideration of CDM as per "Guidelines for the Demonstration and Assessment of Prior Consideration of the CDM" as per EB 60 Annex 26. However the start date for projects under this approach shall be clearly defined as per CDM Glossary of Terms.

In addition to the above a list of chronology of events indicating the key dates of PoA development, is presented below to supplement the argument on prior consideration of CDM:

- South Pole board decides to undertake a composting PoA in Indonesia on 9th June 2008 [20].
- Termination of Fetty Mina co-composting project by EcoSecurities that was under validation with DNV, on 16th October 2008 [21].
- PoA term-sheet signed between Fetty Mina Jaya and South Pole on 6th November 2008 [29]
- Novation agreement signed between South Pole and EcoSecurities for taking over several co-composting projects in Indonesia, on 26th May 2009 [22].
- Tripartite Termination Deed by Fetty Mina Jaya (first CPA), EcoSecurities and Swiss Carbon Assets signed on 3rd September 2009 [37].
- First co-operation agreement (including ERPA) between CPA implementer and CME signed on 30th October 2009 [28].
- PoA documentation is uploaded to the UNFCCC server for public comments on 22nd December 2009.
- PoA validation site visit by TUV SUD team from 15th to 19th February 2010.
- Host Country Approval received on 26th March 2010 [26]
- LoA issued by the Switzerland DNA on 24th June 2010 [27]
- PT. CPI (the CME) is incorporated as per Indonesian regulations on 24th August 2010 [12]

3.9.2 Additionality of PoA

The additionality of the programme has been chosen to be demonstrated at the CPA level as informed in section A.4.3 of the PoA-DD. Although EB clarified that a full additionality assessment is not required in the context of CPA when the additionality can be confirmed by means of the eligibility criteria (EB 60, annex 26, paragraph 4), the PP's approach to demonstrate additionality fully at each CPA level. The same can be considered appropriate due to following reason:.

Due to the heterogeneity across composting and co-composting projects in Indonesia [8, 9, 10, 13, 32, 34, 35], the additionality at CPA level is more focused than demonstrating the additionality at PoA level. Therefore it will be ensured that the demonstration of financial barriers will be specific to every CPA included at any point in time in the PoA.

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The general approach described in the PoA-DD has been assessed initially through the document review followed by on-site discussions.

As the CPA applies a small scale methodology, therefore it is mentioned that the additionality has been demonstrated using the guidance given in 'Attachment A to Appendix B' of the "Simplified modalities and procedures for small-scale CDM project activities".

3.9.3 Approach for demonstrating CPA additionality

The additionality of a CPA under the composting/ co-composting POA would be determined based on benchmark analysis because the project generates financial benefits other than CDM-related income. The template of financial spreadsheet calculation for a typical CPA has been presented to demonstrate that the financial returns of the proposed project are insufficient without CDM consideration to justify the investment. Pre-tax project IRR has been chosen as the financial indicator for the analysis and as benchmark pre-tax local commercial lending rates¹ would be applicable as per Guidelines of the Assessment of Investment Analysis, version 5. The benchmark applicable at the time of CPA investment decision will be lowest compared to any other national/state or regional government banks in Indonesia. The adopted approach has been checked for the real case CPA submitted along with the PoA -DD. The financial spreadsheet calculation of the real case CPA has also been presented which confirms that the project IRR of the project is below the bench mark without CDM revenues [38].

Sensitivity analysis: The Guidance on assessment of investment analysis requires the robustness of the conclusion arrived at to be proved through a sensitivity analysis by varying the critical assumptions to a reasonable variation (± 10%). Accordingly the PP's have identified investment cost, O&M cost and project revenues as parameters to be subjected for sensitivity analysis. If the IRR exceeds the benchmark while altering one the 3 parameters by 10%, the CPA owner shall provide evidence that this scenario is unlikely to occur. If no sufficient proof is provided, the CPA will be considered as non-additional.

The additionality is therefore demonstrated at CPA level as per aforementioned approach. The barrier shall be applicable to all the CPAs within the geographical boundary of Indonesia. The CPAs that also meet the eligibility criteria for inclusion in the PoA would therefore be deemed additional.

3.10 Emission Reductions from a typical CPA

The procedures provided in the methodology are correctly depicted in the PoA-DD and the Generic CPA-DD. The emission reductions would be calculated using the following formula 8 of the methodology AMS.III.F / Version 08.

Yearly methane generation potential for the solid waste composted by the CPA will be calculated using "Tool to determine methane emissions avoided from dumping waste at a solid waste disposal

¹ The local commercial lending rate can be considered as pre-tax benchmark by analysing the Weighted Avereage Cost of Capital (WACC) formula (http://www.investopedia.com/terms/w/wacc.asp#axzz1UbWSDBtV), which is a post-tax benchmark. The WACC consists of two part, equity and debt. Cost of equity is higher then cost of debt, because in the case of bankruptcy, debt holders are repaid before equity holders, therefore decreased risk for debt. While only considering the commercial lending rate as benchmark the debt part only is considered, which is conservative due to the reason above. In the WACC formula, the local commercial lending rate is multiplied by (1-tax rate) to arrive with a post-tax cost of debt. In order to achieve the higher pre-tax value the factor (1-tax rate) has not been considered.



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site" version 5.01. Calculation of methane emission potential of co-composted POME will follow paragraph 18 of AMS.III.F / Version 08.

Project emissions are considered for the 1) CO₂ from incremental transport distance, 2) CO₂ from fossil fuel consumption, and 3) CH₄ from runoff water.

No leakage emissions will be considered since only projects using new equipments are eligible to the PoA. None of the composting equipments were transferred from or to another project activity and the CPAs are completely new facilities.

The formulae in POA-DD are correctly presented for the determination of emission reductions.

TÜV SÜD has assessed the calculations of emission reductions. Corresponding calculations have been carried out based on calculation spreadsheets. The parameters and equations presented in the PoA-DD, as well as other applicable documents, have been compared with the information and requirements presented in the methodology. An equation comparison has been made to ensure consistency between all the formulae presented in the PoA-DD, template CPA-DD, calculation files, methodology AMS.III.F / Version 08 and the "Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" version 5.01.

The assumptions and data used to determine the emission reductions are listed in the PoA-DD and all the sources have been checked.

Based on the information reviewed it is confirmed that the sources used are correctly quoted and interpreted in the PoA-DD.

In accordance with para 92 (e) of VVM 1.2, the calculation spreadsheets and the emission reductions can be replicated using the data and parameter values provided in the design documents.

In summary, the calculation of emission reductions are considered correct and the baseline methodology has been applied correctly according to requirements.

3.11 Monitoring Plan of a typical CPA

The monitoring plan presented in the PoA-DD complies with the requirements of the applicable methodology. The assessment team has verified all parameters in the monitoring plan against the requirements of the methodology and no deviations have been found.

The procedures have been reviewed by the assessment team through document review and interviews with the relevant personnel. The information provided has allowed the assessment team to confirm that the proposed monitoring plan is feasible within the project design. The relevant points of monitoring plan have been discussed with the PoA managing entity and the CPA implementers. Specifically; these points include the monitoring methodology, data management, and the quality assurance and quality control procedures to be implemented in the context of the project. Therefore, the PoA managing entity and/or CPA implementer(s) will be able to implement the monitoring plan and the achieved emission reductions can be reported ex-post and verified.

3.11.1 Parameters determined ex-ante

The parameters that are determined ex-ante are:

- The methane generation capacity of wastewater (tCH₄/tCOD) is taken from IPCC default value for wastewater of 0.21 kg CH4/kg.COD (corrected for uncertainties).
- Methane correction factor for the wastewater treatment system in the baseline scenario will be determined at CPA level based on characteristics of the baseline wastewater considering table III.F.1 of AMS-III.F version 8.
- Model correction factor to account for model uncertainties is considered to be 0.9 as per the



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"Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" version 5.01.

- Oxidation factor (reflecting the amount of methane from SWDS that is oxidised in the soil or other material covering the waste) will be determined of each CPA: accordingly 0.1 will be used for managed solid waste disposal sites that are covered with oxidizing material such as soil or compost and 0 will be used for other types of solid waste disposal sites.
- Fraction of methane in the SWDS gas is considered to be 0.5 as per "Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" version 5.01.
- Fraction of degradable organic carbon (DOC) that can decompose is considered to be 0.5 as per "Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" version 5.01.
- Methane correction factor for SWDS will be determined as per IPCC 2006 Guidelines for National Greenhouse Gas Inventories, volume 3 – Table 3.1. The value can be 1.0 or 0.5 or 0.8 or 0.4.
- Fraction of degradable organic carbon (by weight) in EFB is considered to be 20 % since it can be categorised under 'garden, yard and park waste'. This follows the "Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" version 5.01
- Decay rate for the EFB is considered to be 0.17 as per the "Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" version 5.01, since the EFB characteristics are similar to garden waste and also Indonesia faces similar climate conditions [13].
- CO₂ emission factor from diesel consumption (kg.CO₂/t fuel) is calculated to be 3.185. this is based on i) Emission factor for Gas/Diesel oil: 74.10 tCO₂/TJ (as per IPCC) and ii) NCV for Gas/Diesel oil: 43.33 TJ/103 tonnes (as per IPCC).
- CO₂ emission factor from diesel fuel use due to transportation (kg.CO₂/km) is calculated to be 0.00047. This is based on i) Vehicle Fuel Consumption (volume): 0.175 litres/km and ii) Diesel Density: 0.8425 kg/litre and iii) CO₂ emission factor from fuel use due to transportation: 3.185 kg.CO₂ / kg.fuel. (Data source for i & iii- IPCC; for ii- Pertamania National Oil Company [42]).
- Composting machine efficiency, loader / skidloader (diesel fuel consumption rate per hour) (t.fuel / hour) is calculated to be 0.01146. This is based on 13.6 liter/hour, defined as maximum fuel consumption of loader / skidloader in composting facilities (source- equipment supplier [43]) and Fuel Density: 0.8425 kg/litre. (source- Pertamina National Oil Company [42].
- Composting machine efficiency, turning machine (diesel fuel consumption rate per hour) (t.fuel / hour) is calculated to be 0.03117. This is based on size of turning machine i.e fuel consumption i.e 37 liter/hour for drum width >5-6 meter (source- equipment supplier [44]) and Fuel Density: 0.8425 kg/litre. (source- Pertamina National Oil Company [42].
- Carbon emissions factor of electricity supplied to the project by the palm oil mill in year 'y' (tCO2e/MWh) will be higher of the three sources 1) Technical specifications on fossil fuel use per energy produced multiplied by IPCC 2006 default emission factor, 2) Default IPCC 2006 default emission factor on diesel fuelled stationary combustion applying a conservative generator efficiency of 30% (IPCC chapter 2, page 2.16 ff.) 3. Emission factor listed in Table I.D.1 of the methodology AMS I.D. and 4) Grid emissions factor relevant to the palm oil mill operation (if grid connection is available).
- Emission factor for composting of organic waste (kg CH₄/ton waste) value is considered to be 4 based on assumption of EFB as wet waste as per methodology.



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- Model correction factor to account for model uncertainties of POME is considered to be 0.94 as per AMS III.F version 8 reference: FCCC/SBSTA/2003/10/Add.2, page 25.
- Model correction factor to account for model uncertainties of runoff water is considered to be 1.06 as per AMS III.F version 8 reference: FCCC/SBSTA/2003/10/Add.2, page 25.
- Global warming potential (GWP) of methane, valid for the relevant commitment period (tCO₂e/tCH₄) is fixed to be 21 as per IPCC.

The DOE has validated the correctness of all applied IPCC, solid waste disposal Tool and methodology values. In summary, the parameters determined ex-ante have been presented correctly according to requirements are considered in accordance with the applied methodology and tools.

3.11.2 Parameters determined ex-post

The parameters that are to be monitored ex-post are:

- Total amount of raw EFB treated/ prevented from disposal in year 'y' (t). The parameter will be monitored each truck wise using weighbridge before entry into the composting yard. The weighbridge will be calibrated annually as per the manufacturer.
- Flow rate of POME into the composting facility (m³ / year). The parameter will be measured daily by a cumulative flow meter located at inlet of POME storage pond meant for composting use. The flow meter will be calibrated annually as per the manufacturer.
- Concentration of organic material in POME entering the composting facility (t / m³). COD
 measurement will be done monthly by an accredited third party and representative sampling
 as per the methodology will be ensured.
- Volume of runoff water from the co-composting plant (m³). The parameter will be measured daily by a cumulative flow meter located at outlet of compost yard before aerobic pond. The flow meter will be calibrated annually as per the manufacturer.
- Concentration of organic material in runoff water from the composting facility (t / m³). COD
 measurement will be done monthly by an accredited third party and representative sampling
 as per the methodology will be ensured.
- Quantity of final compost produced in year 'y' (t). The parameter will be monitored each truck wise using weighbridge before exit from the composting yard. The weighbridge will be calibrated annually as per the manufacturer.
- Total capacity of auxiliary equipment installed in the project activity (MW).
- Operating hours of composting plant when biomass power plant is out of operation (hour/year).
- Annual operating hours of skid-loader machine (hour/year).
- Annual operating hours of turning machine (hour/year).
- Average incremental distance for composting transportation (Km/truck).
- Average truck capacity for compost transportation (t/truck).
- Percentage of oxygen content in the compost (%) will be measured using a hand held O₂ meter sampling will be conducted to ensure a maximum margin of error of 10% at a 95% confidence level. The meter will be calibrated annually as per manufacturers' specifications.
- Proper soil application of the compost to ensure aerobic conditions for further decay
- Quantity of methane that would have to be captured and combusted to comply with the prevailing regulations (tonnes of CH₄/ year)



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- Fraction of methane captured at the SWDS and flared, combusted or used in another manner (%)

- Calculation of yearly methane generation potential of the solid waste composted by the project during the years "x" from the beginning of the project activity (x=1) up to the year 'y' (tCO2/year)
- Calculation of methane emission potential in the year 'y' of the wastewater co-composted. (tCO2/year).

In summary, the parameters determined ex-post have been presented correctly according to requirements are considered in accordance with the applied methodology.

3.11.3 Monitoring and Reporting System and Quality Assurance

The operational and management structure has been clearly described and in compliance with the envisioned situation. The responsibilities and institutional arrangements for data collection and archiving has been clearly provided. The information provided in the PoA-DD could be confirmed based on the on-site interviews and also through the submitted documentary evidence - Termsheet between Fetty Mina Jaya and South Pole [29] and ERPA [28].

3.12 Stakeholder Consultation

It has been indicated that the local stakeholder consultation is done at the SSC-CPA level. Since each composting project is considered to have specific local impacts the choice is justified. The stakeholder consultation will be implemented in all CPA's of Indonesia as per CDM Project Approval Mechanism of Indonesian CDM National Commission [40].

The relevant local stakeholders concerned with a CPA will be invited through invitation letter. The summary of the stakeholder meeting will be compiled in the CPA-DD. The assessment team has reviewed the documentation in order to validate the inclusion of relevant stakeholders. Team local expertise has confirmed that the communication method that will be used to invite the stakeholders is appropriate.

Comments presented by the local stakeholders will be taken into account by the CME at CPA level.

Hence, the local stakeholder consultation will be performed adequately at CPA level according to the CDM requirements.

3.13 Environmental Analysis

It has been indicated that the environmental analysis will be done at the CPA level. There are no host country requirements for EIA for this kind of programme – implementing composting/ co-composting for EFB and POME in Palm Oil Mills [14]. However an Environmental Management and Monitoring Plan (EMMP) has to be developed by the individual CPAs. Therefore likely environmental impacts specific to CPA will be discussed at the CPA level.

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4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on the UNFCCC website and invited comments by affected Parties, stakeholders, and non-governmental organisations during a 30 day period.

All key information gathered is presented in the table below

GSP Comments

website:						
http://cdm.unfccc.int/ProgrammeOfActivitie	http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/8NQSNDGXJC1SL5OHIPOBRGZGADTHG6/view.html					
Starting date of the global stakehole	der consultation process:					
2009-12-22						
Comment submitted by: Issues raised:						
None -						
Response by TÜV SÜD:						
-						

omposting and Co-composting Programme of Activities (PoA



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5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM PoA project:

Composting and Co-composting Programme of Activities (PoA) in Indonesia

Standard auditing techniques have been used for the validation of the PoA. A methodology-specific protocol for the PoA has been prepared to conduct the audit in a transparent and comprehensive manner.

The review of the PoA design documentation, subsequent follow-up interviews, and further verification of references have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria in the protocol. In the opinion of TÜV SÜD, the PoA meets all relevant UNFCCC requirements for the CDM if the underlying assumptions do not change. TÜV SÜD recommends the PoA project for registration by the CDM Executive Board.

An analysis, as provided by the applied methodology, demonstrates that the proposed PoA is not a likely baseline scenario. Emission reductions attributable to the PoA are additional to any that would occur in the absence of the project activity. Given that the PoA is implemented as designed, the CPAs under the same are likely to achieve emission reductions.

The validation is based on the information made available to TÜV SÜD, as well as the engagement conditions detailed in this report. The validation has been performed following the VVM requirements. The single purpose of this report is its use during the registration process as part of the CDM project cycle.

Munich, 10-08-2011

Munich, 10-08-2011

Thomas Kleiser

Certification Body "Climate and Energy"
TÜV SÜD Industrie Service GmbH

Nikunj Agarwal
Assessment Team Leader



Annex 1: Validation Protocol

Programme (PoA) Title: Composting and Co-composting Programme of Activities (PoA) in Indonesia

Date of Completion: 10-08-2011

Number of Pages: 45



Table 1 Conformity of CDM Programme of Activities

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
A. General description of small-scale prog	ramm	e of activities (PoA)		
A.1. Title of the small-scale programme of ac	tivities	(PoA)		
A.1.1. Does the used PoA title clearly enable to identify the unique CDM programme of activities?	1	Yes, the PoA title clearly enables to identify the unique CDM PoA.	Ø	Ø
A.1.2. Are there any indications concerning the revision number and the date of the revi-		Yes, the GSP-PoA-DD is indicated version number 01, dated 12/12/2009.	Ø	Ø
sion?		The final version PoA-DD is indicated version number 04, dated 09/08/2011.		
A.1.3. Is this consistent with the time line of the programme's history?	1	Yes.	Ø	\square
A.2. Description of the small-scale programm	e of a	ctivities		
A.2.1. Is the description delivering a transparent overview of the general operating and implementing framework of the PoA?	1, 2, 23, 28, 29, 41	Yes, it has been clearly indicated that the SSC-PoA includes small scale projects which would conduct composting and co-composting of Empty fruit bunches (EFB) and Palm oil mill effluent (POME) from Palm oil mills to avoid methane emissions. The CDM programme activities (CPAs) included in the PoA will be implemented in Republic of Indonesia.	CAR	☑
		Corrective Action Request No.1.		
		Implementing framework needs to be clearer with further details in order to deliver a transparent overview of the implementing framework of the PoA.		
A.2.2. Is the policy/measure or stated goal of the PoA clearly and unambiguously presented?	1, 2, 23, 28, 29,	Yes, it has been presented that the PoA objective is to support the development of composting and co-composting plants in Indonesia by providing a standardized and streamlined access to CDM services	CR	Ø

Programme (PoA) Title: Composting and Co-composting Programme of Activities (PoA) in Indonesia

Date of Completion: 10-08-2011



CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
	41	Clarification Request No. 1. Please clarify which measures have been taken till now to raise awareness among the Palm Oil mill owners as stated in PoA-DD. Also provide suitable evidence to the DOE.		
A.2.3. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	12, 19, 20,	Clarification Request No. 2. Please provide documentary proof to demonstrate that the project description in PDD is in compliance with the actual situation or planning.	CR	☑
A.2.4. Is the information provided by these proofs consistent with the information provided by the PoA-DD?	21, 22, 26	Please refer to section A.2.3	CR	<u> </u>
A.2.5. Is there a valid confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity?	27, 28, 29, 37	Yes, it has been indicated that proposed PoA is a voluntary action by the coordinating/managing entity – PT. Composting Program International (PT. CPI). Clarification Request No. 3. Submit a valid confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity (DNA approval).	CR	Ø
A.2.6. Does the description of the technology to be applied provide sufficient and transparent input to evaluate its impact on the greenhouse gas balance?	27, 28, 29, 37	Yes, the description of technology to be applied provides sufficient and transparent input to evaluate its impact on the greenhouse gas balance.	Ø	Ø
A.2.7. Is the brief explanation how the programme will reduce greenhouse gas emission transparent and suitable?	27, 28, 29, 37	Yes, the brief explanation provided is transparent and suitable enough as to how the programme will reduce greenhouse gas emission.	V	\square
A.3. Coordinating/managing entity and partic	pants	of SSC-PoA		
A.3.1. Is the form required for the indication of project participants correctly applied?	26,	Yes, the form has been correctly applied.	Ø	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
	27			
A.3.2. Is the participation of the listed entities or Parties in the PoA confirmed by each one of them?		PT.CPI and South Pole Carbon Asset Management Ltd have been indicated as the project participants. Clarification Request No. 4.	CR	☑
		Letter of authorization & letter of approval needs to be provided from Indonesian DNA and Swiss DNA respectively.		
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	26, 27	See CR in A.3.2.	CR	Ø
A.3.4. Is it evident that the coordinating or	11,	Yes. The same is indicated in footnote 5.	CR	
managing entity of the PoA is the entity which	26,	Clarification Request No. 5.		
communicates with the Executive Board (EB)?	27	Please submit MoC to DoE.		
A.3.5. Is it evident whether individual project participants are involved in one of the CPAs related to the PoA?	26, 27	It is clearly stated that the PP's may or may not be involved in one of the CPA's related to the PoA.	CR	Ø
		Clarification Request No. 6.		
		Please provide confirmation of the incorporation of PT.CPI in Indonesia as per local regulations. Also confirm the date of such incorporation in the PDD.		
A.4. Technical description of the small-scale	progra	mme of activities	1	•
A.4.1. Location of the programme of activities				
A.4.1.1. Does the information provided on the location of the programme allow for a clear	14, 15,	The CPAs under the PoA will be implemented throughout the host country – Republic of Indonesia.	CAR	V
definition identification of the boundary for the	16,	Corrective Action Request No.2.		
PoA in terms of a geographical area, within which all CPAs included in this PoA will be im-	17, 18	Please include technical description of the small-scale programme of		

Programme (PoA) Title: Composting and Co-composting Programme of Activities (PoA) in Indonesia

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
plemented?		activities in section A.4 of the PDD. Also add the coordinate range of the Host country in section A.4.1.2 that enables a clear definition identification of the boundary for the PoA in terms of a geographical area, within which all CPAs included in this PoA will be implemented.		
A.4.1.2. Is the consideration of all applicable national and/or sectoral policies and regulations of each host country within the boundary evident and substantiated?	14, 15, 16, 17, 18	Corrective Action Request No.3. Although It has been indicated in section A.2 of the PDD that there are no mandatory policies or regulations for composting or cocomposting wastes from Palm oil mill. However, please include the information on all applicable national and/or sectoral policies and regulations which are relevant to the PoA.	CAR	V
A.4.1.3. Is/are the Host Party(ies) stated?	26	Indonesia has been stated as the host party.	V	Ø
A.4.2. Description of a typical small-scale CDM progr	amme a	activity (CPA)		•
A.4.2.1. Is it unambiguously stated which technology or measures are to be employed by the SSC-CPA?	8, 9, 35	Corrective Action Request No.4. Please include briefly the generalised scenario existing prior to start of PoA and short detail on baseline scenario in section A.4.2. Further please provide us the referred evidence in footnote 6 of PoA-DD to the DOE. Also submit a clear evidence of the technology or measures that are to be employed by the SSC-CPA. Please confirm whether the project technology is likely to get substituted by other or more efficient technologies within the project period.	CAR	V
A.4.2.2. Is the type and category of project activities correctly identified and indicated?	8, 9, 35	Corrective Action Request No.5. Please indicate the type and category of the project activity in section A.4.2.1 of the PoA-DD.	CAR	Image: section of the content of the
A.4.2.3. Does the technical design of the project activity reflect current good practices?	8, 9, 35	The PoA supports installation of composting and co-composting facility in Palm oil mills of Indonesia thereby avoiding methane emissions from anaerobic decomposition of EFB and POME. Thus it reflects current good practices	Ø	Ø
A.4.2.4. Does the implementation of the project activity require any technology transfer	8, 9, 35	Clarification Request No. 7. Please indicate whether the implementation of the project activity	CR	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
from Annex-I-countries to the host country (ies)?		require any technology transfer from Annex-I-countries to the host country.		
A.4.2.5. Is the technology implemented by the project activity environmentally safe?	8, 9, 35	Yes. Environmental Analysis of the projects would be done at CPA level as mentioned in Section C.1 and would then prove its safety at CPA level		☑
A.4.2.6. Is the information provided in compliance with actual situation or planning?	8, 9, 35	Please refer to A.4.2.1	CAR	V
A.4.2.7. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	8, 9, 35	Please refer to A.4.2.1	CAR	Ø
A.4.2.8. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	8, 9, 35	See A.4.2.1.	CAR	
A.4.2.9. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	8, 9, 35	Clarification Request No. 8. Please clarify whether the project requires extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period.	CR	Ø
A.4.2.10. Is information available on the demand and requirements for training and maintenance?	8, 9, 35	Clarification Request No. 9. Please submit information on the demand and requirements for training and maintenance that have been identified to be necessary with reference to the technology/ies.	CR	Ø
A.4.2.11. Is a schedule available for the implementation of the project and are there any risks for delays?	8, 9, 35	Clarification Request No. 10. Project implementation schedule needs to be submitted to the DOE.	CR	Image: section of the content of the
A.4.2.12. Are there clear and unambiguous eligibility criteria for the inclusion of a SSC-	8, 9, 35	Partly clear. Corrective Action Request No.6.	CAR	Ø

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CPA into the PoA?		Please include an eligibility criteria with regards to baseline scenario and also clarify whether projects can be bundled or not under this PoA.					
	A.4.3. Description of how the anthropogenic emissions of GHG by sources are reduced by a SSC-CPA below those that would have occurred in the absence of the registered PoA (assessment and demonstration of additionality of the PoA as a whole)						
A.4.3.1. Is it evident and clearly documented that the proposed PoA is a voluntary coordinated action?	26	It has been clearly documented in the PoA-DD that proposed PoA is a voluntary coordinated action. Also see A.3.2.	CR	Ø			
A.4.3.2. Is it evident and substantiated that this voluntary coordinated action would not be implemented in the absence of the PoA?	26	Corrective Action Request No.7. Please provide justification to substantiate that this voluntary coordinated action would not be implemented in the absence of the PoA. Further, PP needs to include information on CDM consideration prior to implementation of PoA and provide evidences for the same. A separate time line for activities related to project implementation and CDM related activities needs to be incorporated.	CAR	N			
A.4.3.3. Is it evident and substantiated that in case the PoA implements a mandatory policy or regulation this would not be enforced otherwise?	1	Not applicable (NA)		\square			
A.4.3.4. Is it evident and substantiated that in case the PoA implements a mandatory policy or regulation that is enforced the PoA will lead to a greater level of enforcement?	1	NA	I				
A.4.4. Operational, management and monitoring plan	for the	programme of activities (PoA)					
A.4.4.1. Is there a clear and transparent description of the operational and management arrangements established by the coordinating/managing entity?	28, 29	The clear and transparent description of the operational and management arrangements established by the PT. CPI has been provided. Clarification Request No. 11. It needs to be clearly stated in section A.4.4.1 of PDD the responsi-	CR	Ø			

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		ble entity for implementation of monitoring plan.		
A.4.4.2. Is there a record keeping system for each CPA under the PoA?	23, 28, 29	Distinct record for each CPA under PoA would be maintained by Pt. CPI Clarification Request No. 12. Please provide the draft excel database referred in "recording keeping system" of PoA-DD which would be used to record details for each CPA.	CR	☑ □
A.4.4.3. Is there a system or procedure to avoid double accounting, i.e. to avoid that an included CPA under this PoA already is a registered CDM project or CPA in another PoA?	23, 28, 29,	Yes, the system to avoid double counting has been indicated. This would be done by PT. CPI through information available on UNFCCC. Also each CPA will have a contractual agreement with CME which includes provisions to avoid double counting. Please refer to A.4.4.2 above	CR	Image: Control of the
A.4.4.4. Is there a system or procedure to detect whether a SSC-CPA to be included in the PoA is not a de-bundled component of another CPA or CDM project?	23, 28, 29,	PT. CPI will have a contractual arrangement with each CPA to ensure that it is not a de-bundled component of another CPA or CDM project. The same has been documented in PDD for transparency. Further the CME would also cross check with the information available on UNFCCC	CAR	Ĭ.
		Corrective Action Request No.8. Please include all the criteria for de-bundling check in PoA-DD (section A.4.4.1) as mentioned in "Guidelines on assessment of debundling for SSC project activities", EB 54 annex 13.		
A.4.4.5. Are provisions in place to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA?	23, 28, 29,	Yes, each CPA will have a contractual agreement with CME which ensures that operators of CPA are aware of and have agreed that their activity is being subscribed to the PoA.	V	Ø
A.4.4.6. Is there a monitoring plan for the PoA, including a description of the proposed statistically sound sampling methods or procedures to be used by the DOE for the verifi-	23, 28, 29,	Corrective Action Request No.9. Please use "General Guidelines for sampling and surveys for small scale CDM project activities", EB50 annex 30, for proposing a sound sampling method in PoA-DD for verification. Also provide us the ISO	CAR	Ø

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cation (please consider sampling among CPAs and within CPAs)?		guidance referred in the PoA-DD for sampling.		
A.4.4.7. In case the coordinating/managing entity opts for a verification method that does not use sampling but verifies each CPA, does the monitoring plan provide a transparent system to ensure that no double accounting occurs and that the status of verification can be determined any time for each CPA?	23, 28, 29,	 Corrective Action Request No.10. It is stated in the PDD that the PT.CPI (coordinating entity) will implement a sampling procedure to be used by the DOE during verification while keeping with itself the option to verify individually some CPAs. Please describe in detail the criteria that shall be applied/ used to determine a CPA's suitability to be sampled or verified individually. As each CPA is expected to have different characteristics and 	CAR	K
		verification periods, please describe clearly a transparent system to ensure that no double accounting occurs and that the status of verification can be determined any time for each CPA.		
A.4.5. Public funding of the small-scale project activity	/			
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1	Clarification Request No. 13. It has been stated that the Composting PoA Indonesia has not received any public funding for the project activity however, it is also stated that CPAs with individual public funding can be included. Please clarify this contradiction.	CR	Ø
A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PoA-DD (in particular annex 2)?	1	See A.4.5.1.	CR	\square
B. Duration of the programme of activities				
B.1. Starting date of the programme of activit	ies			
B.1.1. Is the programme's starting date clearly defined and reasonable?	20	The list of specific CPA's under this PoA that shall have start date prior to the validation of PoA to DOE and UNFCCC secretariat before 31st January' 2010 has been submitted to DOE. Therefore the requirement of § 72 of EB 47 report has been met.	CR	Ø

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		Clarification Request No. 14. The PP is requested to submit a suitable evidence of the assumed start date of PoA i.e 22 June 2007, DoE.		
B.2. Length of the programme of activities (Po	oA)		•	ı
B.2.1. Is the assumed length of the PoA clearly defined by the coordinating managing entity and reasonable (max 28 years)?	2, 41	Yes. The assumed length of the PoA is clearly defined by the coordinating/ managing entity and is reasonable i.e maximum 28 years.	Ø	Ø
C. Environmental Analysis	1		•	
C.1. Definition of the level at which environmental dertaken:	ental a	nalysis as per requirements of the CDM modalities and proce	dures i	s un-
C.1.1. Is it defined whether the environmental analysis takes place at PoA or CPA level?	14, 15, 16, 17, 18	Yes, it has been indicated that the environmental analysis takes place at CPA level.	\square	Ø
C.1.2. Is the choice whether the environ- mental analysis takes place at PoA or CPA level justified?	14, 15, 16, 17, 18	Yes, it has been appropriately justified.	Ø	Ø
C.2. Documentation on the analysis of the en	vironn	nental impacts of the PoA, including transboundary impacts:	•	ı
C.2.1. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	14, 15, 16, 17, 18	Corrective Action Request No.11. Documentation on the analysis of the environmental impacts, including trans-boundary impacts shall be included in the section C.2. It needs to be clearly indicated in section C.2 whether there are any	CAR	Image: Control of the

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		Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, whether an EIA been approved.		
C.2.2. Has the analysis of the environmental impacts of the project activity been sufficiently described?	14, 15, 16, 17, 18	No EIA is necessary for the proposed project activities.	Ø	☑
C.2.3. Will the project create any adverse environmental effects?	14, 15, 16, 17, 18	No EIA is necessary for the proposed project activities.	Ø	\square
C.2.4. Were trans-boundary environmental impacts identified in the analysis?	14, 15, 16, 17, 18	NA	Ø	\square
C.3. Please state whether in accordance with for a typical CPA of the PoA:	the ho	est Party laws/regulations, an environmental impact assessm	ent is re	equired
C.3.1. Have the identified environmental impacts been addressed in the project design sufficiently?	14, 15, 16, 17, 18	Please refer to section C.2.1. Clarification Request No. 15. Please provide us with the government regulation for EIA that is quoted as footnote 11 of PoA-DD- "Government Regulation of PP No. 11/2006 lays out requirements for EIAs".	CR	Ø
C.3.2. Does the project comply with environ- mental legislation in the host country?	14, 15,	Please refer to section C.2.1	CR	Ø

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	16, 17, 18			
C.3.3. Is, per host country laws/regulations, an environmental impact assessment necessary for a typical CPA?	14, 15, 16, 17, 18	Please refer to section C.2.1	CR	Ø
D. Stakeholders' comments				
D.1. Please indicate the level at which local s	takeho	lder comments are invited. Justify the choice:		
D.1.1. Is there a clear statement whether the stakeholder comments will be invited at PoA or CPA level?	2, 41	Yes, it has been indicated clearly that the stakeholder comments would be invited at CPA level.	\square	\square
D.1.2. Is the choice justified in a clear and reasonable manner?	2, 41	Yes the choice has been justified in the PoA-DD.	Ø	Ø
D.1.3. If the stakeholder comments will be invited at PoA level, is there sufficient information provided, on how comments by local stakeholders were invited?	2, 41	NA. Comments on CPA level would also be invited for each CPA	Ø	Ø
D.1.4. If the stakeholder comments will be invited at PoA level, is there a summary of the contents?	2, 41	NA	V	\square
D.1.5. If the stakeholder comments will be invited at PoA level, is there sufficient information provided, on how due account was taken of any comments received?	2, 41	NA		V

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D.2. Brief description how comments by local stakeholders have been invited and compiled							
D.2.1. Have relevant stakeholders been consulted?	2, 41	NA	Ø	Ø			
D.2.2. Have appropriate media been used to invite comments by local stakeholders?	2, 41	NA	Ø	Ø			
D.2.3. If a stakeholder consultation process is required by regulations/laws in the host coun- try, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	2, 41	Clarification Request No. 16. Please clarify and include in PoA-DD whether stakeholder consultation process is required by regulation/laws in the host country. If yes, please document how this stakeholder meeting has been carried out as per the regulations/laws.	CR	Image: Control of the			
D.2.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	2, 41	NA	Ø	\square			
D.3. Summary of the comments received							
D.3.1. Is a summary of the received stake-holder comments provided?	2, 41	NA	Ø	Ø			
D.4. Report on how due account was taken of	any c	omments received					
D.4.1. Has due account been taken of any stakeholder comments received?	2, 41	NA	Ø	Ø			
E. Application of a baseline and monitoring	meth	odology to a typical SSC-CPA					
E.1.Title and reference of the approved SSC ba	seline	and monitoring methodology applied to SSC-CPA included in	the Po	Α			
E.1.1.1.Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	4,5,6 ,7	Corrective Action Request No.12. This section (section E) shall justify and demonstrate the application of the baseline and monitoring methodology to a typical SSC-CPA. The information defines the PoA specific elements that shall be included in preparing the PoA specific form used to define and include	CAR	V			

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		a SSC-CPA in this PoA (PoA specific Cl please indicate the title of the applied m the PoA-DD.				
E.1.1.2.Is the applied version the most recent one and / or is this version still applicable?	4,5,6 ,7	Yes, the version used is the most recent the project for GSP. It is applicable until		Ø	Ø	
E.1.1.3.Is the applied SSC methodology approved by the board, for use in PoA?	4,5,6 ,7	Yes, the applied SSC methodology has for use in PoA.	Yes, the applied SSC methodology has been approved by the board, for use in PoA.			
E.2.Justification of the choice of the methodolo	gy and	d why it is applicable to a SSC-CPA				
E.2.1. Is the applied methodology considered the most appropriate one?	4,5,6 ,7	Yes, the applied methodology AMS III.F- Avoidance of methane emissions through controlled biological treatment of biomass (version 8), is the most appropriate small scale methodology for this kind of programme.		Ø	Ø	
E.2.2. Does the SSC methodology account for leakage in the context of a SSC-CPA?	4,5,6 ,7			CR	Ø	
		Corrective Action Request No.13.				
		Please clarify in PoA-DD whether the Powhere equipment is transferred from an equipment is transferred to another active Please include the same in PoA-DD for	other activity or if the existing vity (in context of leakage).			
Integrate the required amount of sub-checklists on the a answered with "No";	applicat	pility criteria as given by the applied metho	odology and comment on at lea	ast every	line	
E.2.2.1.	4,5,6			CAR	Ø	
Criterion 1: This methodology comprises	,7	Applicability checklist	Yes / No / NA			
measures to avoid the emissions of me-		Criterion discussed in the PDD?	Yes			
thane to the atmosphere from biomass		Compliance provable?	No			

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or other organic matter that would have otherwise been left to decay anaerobically in a solid waste disposal site (SWDS), or in an animal waste management system (AWMS). In the project activity, controlled biological treatment of biomass is introduced through one, or a combination, of the following measures: (a) Aerobic treatment by composting and proper soil application of the compost; (b) Anaerobic digestion in closed reactors equipped with biogas recovery and combustion/flaring system.one fossil fuel fired generating unit.		Compliance verified? Corrective Action Request No.14. Please correct the applicability criteria 1 in the PDD (This methodology comprises measures to avoid the emissions) as per the methodology. Also submit reliable evidence to prove for the PoA the following: In the absence of the project activity EFB are left to decay anaerobically in a solid waste disposal site for each CPA under this SSC-PoA.		
E.2.2.2. Criterion 2: The project activity does not recover or combust landfill gas from the disposal site (unlike AMS-III.G), and does not undertake controlled combustion of the waste that is not treated biologically in a first step (unlike AMS-III.E). Project activities that recover biogas from wastewater treatment shall use methodology AMS-III.H.	4,5,6	Applicability checklist Criterion discussed in the PDD? Yes Compliance provable? NA Compliance verified? NA Corrective Action Request No.15. Please correct the Applicability criteria 2 in the PDD (The project activity does not recover or combust landfill gas from the disposal site) as per the methodology, AMS-III.F ver8.	CAR	v
E.2.2.3.Criterion 3: Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO2 equivalent annually.	4,5,6 ,7	Applicability checklist Criterion discussed in the PDD? Compliance provable? Yes / No / NA Yes Yes	Ø	Ø

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		Compliance verified? Yes		
E.2.2.4. Criterion 4: This methodology is applicable to the treatment of the organic fraction of municipal solid waste and biomass waste from agricultural or agroindustrial activities including manure. Project activities involving anaerobic digestion and biogas recovery from manure shall apply AMS-III.D or AMS-III.R.	4,5,6 ,7	Applicability checklist Criterion discussed in the PDD? No Compliance provable? No Compliance verified? No Corrective Action Request No.16. Please discuss the applicability criteria 4, 7, 8 as per AMS-III.F ver8 in PoA-DD. Also submit reliable evidence to prove the criteria 4.	CAR	Ø
E.2.2.5.Criterion 5: This methodology includes construction and expansion of treatment facilities as well as activities that increase capacity utilization at an existing facility. For project activities that increase capacity utilization at existing facilities, project participant(s) shall demonstrate that special efforts are made to increase the capacity utilization, that the existing facility meets all applicable laws and regulations and that the existing facility is not included in a separate CDM project activity. The special efforts should be identified and described.	4,5,6	Applicability checklist Criterion discussed in the PDD? No Compliance provable? No Compliance verified? No Corrective Action Request No.17. Please discuss the applicability criteria 5 in the PDD, as per AMS-III.F ver8 in PoA-DD. Also submit reliable evidence to prove the same.	CAR	Ø

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E.2.2.6.Criterion 6: This methodology is also applicable for co-treating wastewater and solid biomass waste, where wastewater would otherwise have been treated in an anaerobic wastewater treatment system without biogas recovery.	4,5,6	Applicability checklist Criterion discussed in the PDD? Compliance provable? No Compliance verified? No Clarification Request No. 17. 1. Please submit reliable evidence to prove criteria 6 for the PoA the following: In the absence of the project activity EFB are left to decay anaerobically in a solid waste disposal site for each CPA under this SSC-PoA. 2. A confirmation shall be included with reference to the later part of § 6 of AMS. III.F. 3. A transparent discussion on relevance of § 7 of III.F and also § 4, 6 and 7 of AMS.III.E shall be included in this section of the PDD.	CR	
E.2.2.7.Criterion 7: In case residual waste from the biological treatment (slurry, compost or products from those treatments) are handled aerobically and submitted to soil application, the proper conditions and procedures (not resulting in methane emissions) must be ensured.	4,5,6	Applicability checklist Criterion discussed in the PDD? Compliance provable? Compliance verified? No Please refer to E.2.2.4	CAR	N
E.2.2.8. Criterion 8: In case residual waste from the biological treatment (slurry, compost or products from those treatments) are treated thermally/mechanically, the provisions in AMS-III.E related to thermal/mechanical treatment shall be applied.	4,5,6	Applicability checklist Criterion discussed in the PDD? Compliance provable? Compliance verified? No Please refer to E.2.2.4	CAR	

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E.3.Description of the sources and gases included in the SSC-CPA boundary								
E.3.1.	Does the SSC-CPA boundary include the physical and geographical location where the programme activities take place?	4,5,6 ,7	Yes, a generalised SSC-CPA boundary has been included in the PoA-DD which includes the geographical location where the programme activities take place.		Ø			
E.3.2.	Are all sources and gases within the boundary considered in a clear manner?	4,5,6 ,7	Yes, the sources and gases within the boundary have been considered in a clear manner.	CAR	Ø			
			Corrective Action Request No.18.					
			Please clarify why project emission from composting in table 4 has not been considered. Further, project emission from Electricity is not considered as an emission source in table 4 and figure 3, please clarify					
dis	Do the spatial and technological bundaries as verified on-site comply with the scussion provided by / indication included to e PoA-DD?	4,5,6 ,7	Yes, the technological boundaries has been discussed and verified to be as per AMS.III.F		Ø			
E.4.Desc	ription of how the baseline scenario is	identi	fied and description of the identified baseline scenario:					
E.4.1.	Have all technically feasible baseline sce-	4,5,6	Corrective Action Request No.19.	CAR	\square			
	nario alternatives to the PoA been identi- fied and discussed by the PoA-DD? Why can this list be considered as being com- plete?	,7	Please include the description with steps as to how baseline scenario has been identified for CPAs in section E.4 of PoA-DD. Also provide documentary evidences to substantiate the identified baseline scenario.					
E.4.2.	Does project identify correctly and exclude those options not in line with regulatory or legal requirements?	4,5,6 ,7	Please refer to E.4.1	CAR	Ø			
E.4.3.	Have applicable regulatory or legal requirements been identified?	4,5,6 ,7	Please refer to E.4.1	CAR	Ø			
E.4.4.	Does the PoA-DD identify the most likely	4,5,6	Please refer to E.4.1	CAR				

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	baseline scenario in absence of the project activity?	,7			
E.4.5.	Is this identification supported by official and/or verifiable documents (e.g. studies, web pages, certificates, etc?	4,5,6 ,7	ease refer to E.4.1		
E.4.6.	Is the identified baseline scenario in line with regulatory or legal requirements?	4,5,6 ,7	Corrective Action Request No.20. Please justify in section E.4 of PoA-DD whether the identified baseline scenario is in line with regulatory or legal requirements		
			of GHG by sources are reduced below those that would have egistered PoA (assessment and demonstration of additionali		ed in
E.5.1.	Are the key criteria and data for assessing additionality of a SSC-CPA that is to be included into the PoA clearly and unambiguously stated?	28, 29, 33, 36, 38	As the PoA applies the small scale methodology therefore the additionality can be demonstrated using the guidance given in 'Attachment A to Appendix B' of the "Simplified modalities and procedures for small-scale CDM project activities".	V	
E.5.2.	Are the key criteria and data for assessing additionality of a SSC-CPA that is to be included into the PoA based on the additionality assessment in section E.5.1 of the PoA-DD?	28, 29, 33, 36, 38	Corrective Action Request No.21. Please include criteria for demonstrating prior consideration of CDM n section E.5.2 for CPA whose start date is before the GSP of PoADD Clarification Request No. 18. As per the stated baseline scenario, implementation of project activity would avoid anaerobic treatment of POME and EFB, thereby avoiding some operational and management expenses. Please clarify why this parameter has not been taken into consideration as an ncome source		
E.5.3.	Is the choice of the criteria justified, based on the analysis in section E.5.1 of the PoA-DD?	28, 29, 33,	Clarification Request No. 19. Please clarify which approach would be followed to be prove the 'in-	CR	Ø

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		36, 38	vestment barrier' as per Attachment A to appendix B.		
E.5.4.	Does it become evident how these criteria would be applied to assess the additionality of a typical CPA at the time of inclusion?	28, 29, 33, 36, 38	Please refer to E.5.2 Clarification Request No. 20. Please submit the standard excel worksheet developed for IRR computation which would be used by CPA for computation of IRR	CAR, CR	⊠
E.5.5.	Is this information incorporated into the specific CDM-SSC-CPA-DD ("real case")?	28, 29, 33, 36, 38	Yes		Image: Control of the
d tr c	If the starting date of the programme ctivity is before the date of validation, is evience available to prove that incentive from the CDM was seriously considered in the desision to proceed with the programme activity?	28, 29, 33, 36, 38	Please refer to A.4.3.2		N
E.5.7.	Is a complete list of barriers developed nat prevents the project activity to occur?	28, 29, 33, 36, 38	As per Attachment A to appendix B to the simplified Modalities & Procedures financial barrier has been taken into consideration		Ø
E.5.8.	Does this list include at least one of the bllowing barriers?	28, 29, 33, 36, 38	Barrier Discussed? Verifiable? Investment Yes No Technological No NA Due to prevailing practice No NA Other No NA	CAR, CR	M

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		Please refer to section E.5.2		
E.5.9. Does the discussion sufficiently take into account relevant national and/or sectoral policies?	28, 29, 33, 36, 38	Corrective Action Request No.22. Please include all the relevant national and sectoral policies in section E.5.2	CAR	Ø
E.5.10. Is transparent and documented evidence provided on the existence and significance of these barriers?	-	Please refer E.5.6		Ø
E.5.11. Is it appropriately explained how the approval of the project activity will help to overcome the identified barriers?	-	Please refer E.5.4	CR	☑
E.6.Estimation of Emission reductions of a CPA	4			
E.6.1. Explanation of methodological choices, provide	ed in the	e approved baseline and monitoring methodology applied, selected for a	typical (CPA
E.6.1.1.Is it explained how the procedures provided in the methodology are applied?	4, 5, 6, 7	Partly. Please refer to E.6.1.2	CAR	Ø
E.6.1.2.Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	4, 5, 6, 7	Please also refer to E.4.1 Corrective Action Request No.23. Please justify all the relevant methodological choices taken for the computation of emission reduction as per the applied methodology in section E.6.1 of PoA-DD. Explain how the procedures, in the approved project category to calculate project emissions, baseline emissions, leakage emissions and emission reductions are applied to the proposed project activity. Clearly state which equations will be used in calculating emission reductions. Explain and justify all relevant methodological choices, including: • where the category provides different options to choose from (e.g. "combined margin" under AMS I.D);	CAR, CR	

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		where the category provides for different default values		
E.6.2. Equations, including fixed parametric values, to	be use	ed for calculation of emission reductions of a SSC-CPA:		
E.6.2.1.Are the formulae required for the determination of emission reductions correctly presented, enabling a complete identification of parameters to be used and / or monitored?	4, 5, 6, 7	Corrective Action Request No.24. Computation of baseline emission (BEy) is not in line with AMS III.F ver8. Please correct the formula applied as per the methodology. Also state in PoA-DD which version of "tool to determine methane emissions" has been used. Also the formula for MEP _{y,ww} , PE _y , PE _{y, transp,} PE _{y,runoff} , needs correction in the PDD in section E6.2.	CAR, CR	
		 Corrective Action Request No.25. 1. Please clarify in section E.6.1 why PE_{y,res waste} has not been taken into consideration as one of sources for project emission. 		
		2. As per the methodology, PE _{y,power} determines project emission from electricity and fossil fuel consumption by project activity facilities. Please clarify whether there will be any project emission from fossil fuel consumption apart from electricity, if yes, please incorporate the electricity component in PE _{y,power}		
		3. Please correct final equation for project emission in page 28 of PoA-DD to include project emission during composting (PE _{y,comp}). Please define clearly in PoA-DD how different values of EF _{composting} can be taken based on its oxygen content (aerobic and anaerobic). Also state how it is monitored during the crediting period.		
		4. Confirm whether the requirement of § 32 of AMS III.F is met in the PDD.		
E.6.2.2.\Are the equations, including fixed parametric values, to be used for calculation of emission reductions of a SSC-CPA, completely presented?	4, 5, 6, 7	Please refer to CAR 19 Clarification Request No. 21. Please provide us the standard Emission reduction calculation sheet which would be used for ER computation from each CPA.	CAR, CR	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.6.3. Data and parameters that are to be reported in	CDM-S	SSC-CPA-DD form			
E.6.3.1.Is the list of parameters presented in chapter E.6.3 considered to be complete with regard to the requirements of the applied methodology?	4, 5, 6, 7	No Corrective Action Request No.26. Please include the data unit of MD _{y,reg} as per the Please include the measurement methods and would be used for each CPA to determine this Also please include composting machine efficiency GWP _{CH4} .	d procedure which parameter in future.	CAR	Ø
E.6.3.2.Comment on any line answered with "No	"			•	
E.6.3.2.1. parameter Title: B _{O,WW} – Methane producing capacity for the wastewater	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described?	Yes / No / NA Yes Yes Yes Yes Yes Yes Yes Yes Yes NA	V	Ø
E.6.3.2.2. parameter Title: MCF _{WW,Treatment} – Methane correction factor for the wastewater treatment system in the baseline scenario	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described?	Yes / No / NA Yes Yes Yes Yes Yes Yes Yes No NA	CAR	Ø

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		Please refer to section E.4.1			
E.6.3.2.3. parameter Title: Φ– Model correction factor to account for model uncertainties	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described?	Yes / No / NA Yes Yes Yes Yes Yes Yes Yes Yes Yes NA	☑	অ
E.6.3.2.4. parameter Title: OX- Oxidation factor (reflecting the amount of methane from SWDS that is oxidised in the soil or other material covering the waste)	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? Clarification Request No. 22. "Tool to determine methane emissions avoided waste at a solid waste disposal site" states that		CR	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		Final
		conducted for determining the oxidation factor, please clarify how th parameter would be determined for each CPA.	S	
E.6.3.2.5. parameter Title: F- Fraction of methane in the SWDS gas (volume fraction)	4, 5, 6, 7	Data Checklist Title in line with methodology? Yes Data unit correctly expressed? Appropriate description of parameter? Yes Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? NA	N	
E.6.3.2.6. parameter Title: DOC _f — Fraction of degradable organic carbon (DOC) that can decompose	4, 5, 6, 7	Data Checklist Title in line with methodology? Yes Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? NA	V	☑
E.6.3.2.7. parameter Title: MCF – Methane correction Factor	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Yes / No / NA Yes Yes Yes	CAR	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
		Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? Please refer to section E.4.1	Yes Yes NA Yes NA		
E.6.3.2.8. DOCj - Fraction of degradable organic carbon (by weight) in the waste type j	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described?	Yes / No / NA Yes Yes Yes Yes Yes Yes Yes Yes Yes NA	Ø	Image: Control of the
E.6.3.2.9. K _j - Decay rate for the waste type j	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described?	Yes / No / NA Yes Yes Yes Yes Yes Yes Yes No NA	CR	V

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
		Clarification Request No. 23. Please submit documents mentioned in footnot the choice of value for Kj	te 24 to substantiate		
E.6.3.2.10. EF _{CO2} - CO2 emission factor from diesel fuel use due to transportation	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? Corrective Action Request No.27. Please correct the value of EF _{CO2} chosen for the same transparently.	Yes / No / NA Yes Yes Yes Yes No Yes No Yes Yes No Yes No	Ø	
E.6.3.2.11. UF _{b,baseline} - Model correction factor to account for model uncertainties of co-composted wastewater	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? Corrective Action Request No.28. The parameter U _{b,baseline} and U _{b,project} is not consideration.	Yes / No / NA Yes No Yes Yes Yes Yes Yes Yes Yes NA	CAR	V

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS			Final
		PoA-DD (please check page 26, 27). Please maconsistent across the PoA-DD	ake all the parameters		
E.6.3.2.12.UF _{b,project} - Model correction factor to account for model uncertainties of runoff water	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? Refer to E.6.3.2.12 above	Yes / No / NA Yes No Yes Yes Yes Yes Yes Yes NA	CAR	
E.6.3.2.13.EFelec,i - Emission factor of electricity source i used at composting plant	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described?	Yes / No / NA Yes No Yes Yes Yes Yes Yes Yes NA	V	
E.6.3.2.14. Composting machine efficiencies	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed?	Yes / No / NA No No	CAR	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
		Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? See CAR 26.	No No No No No		
E.6.3.2.15. EF _{composting}	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? See CAR 26.	Yes / No / NA No	CAR	☑
E.6.3.2.16. , GWP _{CH4}	4, 5, 6, 7	Data Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided? Has this value been verified? Choice of data correctly justified? Measurement method correctly described? See CAR 26.	Yes / No / NA No	CAR	☑

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.Application of the monitoring methodology	and d	escription of the monitoring plan			
E.7.1. Data and parameters to be monitored by each	SSC-C	PA			
E.7.1.1.Is the list of parameters presented in chapter E.7.1 considered to be complete with regard to the requirements of the applied methodology?		No Corrective Action Request No.29. Please include parameter for monitoring electric project activity Clarification Request No. 24. Please clarify why parameter MD _{y,reg} has not be toring list (section E.7.1), instead its been ment (parameters reported).	een added in the moni-	CAR	V
		$\label{eq:corrective Action Request No.30.} $			
E.7.1.2.Parameter Title: Qy Quantity of waste composted in the year "y) (tonnes)	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate?	Yes / No N	CAR	

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
CHECKLIST TOPIC / QUESTION	Rei.	Corrective Action Request No.31. Please include the following parameter in the monitoring plan: • 'Qy, Quantity of waste composted in the year "y in the monitoring plan of PoA-DD • composition of waste composted through representative sampling • EF _{CO2} - CO2 emission factor from fuel use due to transportation (kgCO2/km) • BE _{CH4,SWDS,y} - yearly methane generation potential of the soli waste composted by the project during the years "x" from the beginning of the project activity (x=1) up to the year "y" • MEP _{y,ww} - Methane emission potential in the year "y" of the wastewater. The value of this term is zero if co-composting wastewater is not included in the project. • f - fraction of methane captured at the SWDS and flared, combusted or used in another manner	- d ne	Fillal
E.7.1.3.Parameter Title: composition of waste composted through representative sampling	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? No Data unit correctly expressed? Appropriate description of parameter? No Source clearly referenced? Correct value provided for estimation? Has this value been verified? No Measurement method correctly described? No Correct reference to standards? Indication of accuracy provided? No QA/QC procedures described? No	CAR	⊠

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
		QA/QC procedures appropriate?	No		
		Please refer to CAR 31 above			
		Corrective Action Request No.32.			
		Please include description of measurement me quency and QA/QC procedures for all the mor cluding Q _y , Composition of waste biologically t be applied to all CPAs under this PoA. Also ple ing of operating hours of composting plant who of operation, operating hours of machines.	itored parameters (in- reated,) which shall ease include monitor-		
E.7.1.4. Q _{v.ww.in} - Volume of waste water enter-	4, 5,			CAR	\square
ing into co-composting facility in the year	6, 7	Monitoring Checklist	Yes / No		
y (m3)		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	No		
		Correct value provided for estimation?	NA		
		Has this value been verified?	NA		
		Measurement method correctly described?	No		
		Correct reference to standards?	NA		
		Indication of accuracy provided?	NA		
		QA/QC procedures described?	No		
		QA/QC procedures appropriate?	No		
		Please refer to CAR 30 & 32			
E.7.1.5. COD _{y,ww,untreated} - Chemical oxygen de-	4, 5,			CAR	\square
mand of the wastewater entering the co-	6, 7	Monitoring Checklist	Yes / No		
composting facility in the year y		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	No		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.1.6. Q _{y,ww,runoff} - Volume of runoff water in the year y (m3)	4, 5, 6, 7	Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 30 & 32 above Corrective Action Request No.33. As per the applied methodology, please includ kind of measurement and sampling methods were termine the value for COD _{y,ww,untreated} and COD _y . Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate?	ould be used to d	t	☑
E.7.1.7. COD _{y,ww,runoff} - Chemical oxygen demand of the runoff water leaving the composting facility in the year y (tonnes/m3)	4, 5, 6, 7	Please refer to CAR 30 & 32 Monitoring Checklist Title in line with methodology? Data unit correctly expressed?	Yes / No Yes Yes	CAR	Image: section of the content of the

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.1.8.Parameter Title: CTy average truck capacity for waste transportation (tonnes/truck)	4, 5, 6, 7	Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 30 & 32 Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided?	Yes No NA NA NO NA NA NO NO NO Ves Yes No NO NA NA NO NA NA NA NO NA NA NO NA NO NA NO NA NO NO NA NO NA NO NO NA NO NO NA NO NA NO NO NA NO NO NA NO	CAR	✓
E.7.1.9. Q _{y,comp} – Quantity of final compost pro-	4, 5,	QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 30 & 32 Monitoring Checklist	No No Yes / No	CAR	V
duced in year y (tonnes)	6, 7	Title in line with methodology? Data unit correctly expressed?	Yes Yes		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
		Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 32	Yes No NA NA NO NA NO NA NO NA NO NO NO		
E.7.1.10. FCy – Quantity of fossil fuel consumed by the project in year 'y'	4, 5, 6, 7	Please refer to E.6.2.1		CR	☑
E.7.1.11. DAFw – Average incremental distance for waste transportation	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 32	Yes / No Yes Yes Yes No NA NA NA NO NA NA NO NA NO NA NO NA NO NA NO NA NA NO NA NO NO NO	CAR	ত
E.7.1.12. DAF _{comp} – Average incremental distance	4, 5, 6, 7	Monitoring Checklist Title in line with methodology?	Yes / No Yes	CAR	V

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.1.13. CT _{y,comp} – Average truck capacity for compost transportation (tonnes/truck)	Ref. 4, 5, 6, 7	Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 32 Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation?	Yes Yes No NA NA NO NA NO NA NO NO Ves Yes Yes Yes No NA	CAR	Final ☑
E.7.1.14. Parameter Title: Energy used by the project activity, i.e. for aeration, turning of compost piles, pre-processing of biomass, drying of fi-	4, 5, 6, 7	Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 32 Monitoring Checklist Title in line with methodology? Data unit correctly expressed?	NA NO NA NO NA NO NO NO Ves / NO NO NO	CAR	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS			GSP	Final
E.7.1.15. Parameter Title: BECH4,SWDS,y yearly methane generation potential of the solid waste composted by the pro- ject during the years "x" from the begin- ning of the project activity (x=1) up to the year "y"	4, 5, 6, 7	Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Corrective Action Request No.34. Please include the parameter to monitor the enthe project activity (ex: for aeration, turning of processing of biomass, drying of final compost Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate?	compost piles,	, pre-	CAR	Final
		Please refer to CAR 31				

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.1.16. Parameter Title: MDy,reg Amount of methane that would have to be captured and combusted in the year "y" to comply with the prevailing regulations	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CR 24	Yes / No N	CR	☑ □
E.7.1.17. Parameter Title: MEPy,ww Methane emission potential in the year "y" of the wastewater. The value of this term is zero if co-composting of wastewater is not included in the project.	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 31	Yes / No N	CAR	Image: Control of the

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CHECKLIS	T TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.1.18. (%)	Oxygen level in the compost	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate?	Yes / No Yes Yes Yes No NA NA NA NO NA NO NA NO NA NO NA NO NA NO NO NO NO NO	CAR	Image: Control of the
E.7.1.19. (°C)	Temperature in the compost	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 32.	Yes / No Yes Yes Yes No NA NA NO NA NA NO NA NO NA NO NA NO NA NO NO NO	CAR	V

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.1.20. Moisture content in the compost (% water content)	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate?	Yes / No Yes Yes Yes No NA NA NO NA NA NO NA NO NA NO NA NO NA NO NA NO NO NO	CAR	Image: Control of the
E.7.1.21. Soil application of the compost in agriculture or related activities (this includes documenting the sales or delivery of the compost final product). It shall also include an in situ verification of the proper soil application of the compost to ensure aerobic conditions for further decay.	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 32 Corrective Action Request No.35.	Yes / No Yes Yes Yes No NA NA NO NA NA NO NA NO NA NO NA NO NA NO NO NO	CAR	Image: Control of the

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
		Why the parameter Soil application of top plantation is repeated twice? Please contains a second secon	orrect.		
		Please explain how the parameters oxy post and temperature in the compost of ment of § 33 of AMS.III.F.	, 0		
E.7.1.22. Operating hours of composting plant when biomass plant is out	4, 5, 6, 7	Monitoring Checklist	Yes / No	CAR	V
of operation	0, 7	Title in line with methodology? Data unit correctly expressed?	No No		
		Appropriate description of parameter?	No		
		Source clearly referenced? Correct value provided for estimation?	No No		
		Has this value been verified? Measurement method correctly described?	No No		
		Correct reference to standards? Indication of accuracy provided?	No No		
		QA/QC procedures described? QA/QC procedures appropriate?	No No		
		Please refer to CAR 32			
E.7.1.23. Operating hours of machines	4, 5, 6, 7	Monitoring Checklist	Yes / No	CAR	Ø
	0, 1	Title in line with methodology?	No		
		Data unit correctly expressed? Appropriate description of parameter?	No No		
		Source clearly referenced?	No		
		Correct value provided for estimation?	No		
		Has this value been verified?	No		
		Measurement method correctly described?	No		
		Correct reference to standards? Indication of accuracy provided?	No No		
		I mulcation of accuracy provided?	INU		

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
Further parameters required due to "Tool to determine E.7.1.24. W _x Amount of organic waste prevented from disposal in year 'x'		QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 32	No No No Solid waste disposal Yes / No Yes Yes Yes No NA NA NO NA NA NO NA NO NA NO NO NO NO NO NO		Final
E.7.1.25. Parameter Title: f fraction of methane captured at the SWDS and flared, combusted or used in another manner	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified?	Yes / No	CAR	☑

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		GSP	Final
E.7.1.26. Parameter Title: Pn,j,x Weight fraction of the waste type j in the	4, 5, 6, 7	Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? Please refer to CAR 31, 32 Monitoring Checklist Title in line with methodology?	No No No No No No	GSP	Final ☑
sample n collected during year x		Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified? Measurement method correctly described? Correct reference to standards? Indication of accuracy provided? QA/QC procedures described? QA/QC procedures appropriate? NA. Because there is only one waste category	NA N		
E.7.1.27. Parameter Title: z Number of samples collected during year x	4, 5, 6, 7	Monitoring Checklist Title in line with methodology? Data unit correctly expressed? Appropriate description of parameter? Source clearly referenced? Correct value provided for estimation? Has this value been verified?	Yes / No NA NA NA NA NA NA NA NA	☑	V

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
		Measurement method correctly described? NA Correct reference to standards? NA Indication of accuracy provided? NA QA/QC procedures described? NA QA/QC procedures appropriate? NA NA. Because there is only one waste category (EFB).		
E.7.2. Description of the monitoring plan for a SSC-C	PA		1	
E.7.2.1.Is the operational and management structure clearly described and in compliance with the envisioned situation?	28, 29	Yes, the operational and management structure has been defined in the PoA-DD. Clarification Request No. 25. Please describe appropriately which all parameters would be calibrated and what shall be the monitoring frequency (and recording frequency) for all the parameters in section E.7.1 of PoA-DD	CR	N
E.7.2.2.Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	28, 29	Yes, it has been indicated.		\square
E.7.2.3.Does the monitoring plan provide current good monitoring practice?	28, 29	Please refer to section E.7.2.1 above	CR	Ø
E.7.2.4.If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	28, 29	NA	Image: section of the content of the	Ø
E.8.Date of completion of the application of the person(s)/entity(ies)	basel	ine study and monitoring methodology and the name of the r	espons	ible
E.8.1.1.Is there any indication of a date when the baseline was determined?	2, 41	Yes	Ø	Ø
E.8.1.2.Has dd/mm/yyyy format been used to indicate the date?	2, 41	Corrective Action Request No.36. Please indicate the dd/mm/yyyy format to indicate the date of base-	CAR	Ø

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
		line determination.		
E.8.1.3.Is this consistent with the time line of the PoA-DD history?	2, 41	Yes	V	Ø
E.8.1.4.Is the information on the person(s) / entity (ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	2, 41	Yes		v
E.8.1.5.Is information provided whether this person / entity is also considered a project participant?	2, 41	Please refer to section E.8.1.2 above	CAR	\square
F. Annexes 1 – 4				
F.1. Annex 1: Contact Information				
F.1.1. Is the information provided consistent with the one given under section A.3?	2, 41	Yes	Ø	Ø
F.1.2. Is the information on all private participants and directly involved Parties presented?	2, 41	Yes	Ø	Ø
F.2. Annex 2: Information regarding public fund	ing			
F.2.1. Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	2, 41	NA	Ø	V
F.2.2. If necessary: Is an affirmation available that any such funding from Annex-l-countries does not result in a diversion of ODA?	2, 41	NA	Ø	V

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	GSP	Final
F.3. Annex 3: Baseline information				
F.3.1. If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	2, 41	No information is provided in Annex-3	Ø	Ø
F.3.2. Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	2, 41	NA	V	\square
F.3.3. Does the additional information substantiate / support statements given in other sections of the PDD?	2, 41	No extra information is provided in Annex-3	V	\square
F.4. Annex 4: Monitoring information				•
F.4.1. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PoA-DD?	2, 41	No additional information is provided in Annex-4	Ø	Ø
F.4.2. Is the information provided verifi- able? Has sufficient evidence been provided to the validation team?	2, 41	NA	V	
F.4.3. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PoA-DD?	2, 41	No additional information is provided in Annex-4	Ø	Ø

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Table 2 Resolution of Clarification and Corrective Action Requests

Requests by validation team	Ref. to	Summary of programme owner response	Validation team
	table 1		Conclusion
Corrective Action Request No.1. Implementing framework needs to be clearer with further details in order to deliver a transparent overview of the implementing framework of the PoA.	A.2.1	Implementing framework has been revised to be clearer in order to deliver a transparent overview of the implementing framework of the PoA. PoA DD has been revised in section A.2 page 2. Second Response: Reference document for the quoted values in section A.2 has been submitted to DOE (Relevants documents: D. Darnoko, "Green house Gas Reduction Potential at Palm Oil Mill in Indonesia") Third Response: PoA DD has been revised in section A.2 page 2 to be inline with documentary evidence provided in the previous submission to DOE (Relevants documents: CB1 D.Darnoko "Greenhouse Gas Reduction Potential at Palm Oil Mill in Indonesia"). Fourth Response:	General operating and implementing framework has been updated, however please provide us the documentary evidence for the quoted values in section A.2 (total CPO production in Indonesia, number of palm oil mills, capacity range) Response from audit team: The CPO production value in the provided attachment refers to value on 2006, however the PoA-DD present the value of 2009 as 20 million tons per year, needs PP's clarification on this. Further total number of palm oil mills operating in Indonesia is 362 as per provided document, whereas the PoA-
		Indonesian Palm Oil Board 2010 report has been provided to DOE, with year 2009 industry data: 21.5 million tons / year, and 608 mills in operation. The PoA-DD has been revised accordingly.	DD has 400. Please clarify these inconsistencies or submit an updated reference.
		(Relevant document: DA1 Factsheet Palm Oil Indonesia)	Response from audit team: This particular document is

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			dated Dec. 2006. The audit team still insists that an updated reference be used to inform the reader about the situation more contemporary to PoA start date (June 2008).
			Final response by audit team: Considering updated information from the reference- "Indonesian Palm Oil Board 2010 report", the implementing framework in final version POADD is transparent with all details in order to deliver an overview of the implementing framework of the PoA.
Clarification Request No. 1. Please clarify which measures have been taken till now to raise awareness among the Palm Oil mill owners as stated in PoA-DD. Also provide suitable evidence to the DOE.	A.2.2	The coordinating entity has held several workshops about CDM and PoA composting in the city of Jakarta, Medan and Pekanbaru. Relevant documents regarding the workshop have been submitted to DOE as reference. Relevant documents (PoA Composting_Workshop Report.pdf)	It can be verified from the provided document (minutes, photographs, attendance sheet) that PPs have taken measures to raise awareness among palm oil mill owners.
Clarification Request No. 2. Please provide documentary proof to demonstrate that the project description in PDD is in compliance with the actual situation or planning.	A.2.3	All documents to demonstrate the project description has been submitted to DOE. (Relevant documents: CTE_15_Schuchardt_Compos) Second Response: The latest document about detail on actual situation in the project description has been submitted to DOE.	The provided document gives detail on actual situation during 2002 in Indonesia; please provide us the latest documentary evidence.

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		(Relevant document: PoA_6-1vortrag-iopc-2010-frank). Third Response: The latest documentary evidence available about detail on actual situation in the project description is the presentation from Dr. Schuchardt on International Oil Palm Conference IOPC 2010, Yogyakarta, Indonesia. This document has been submitted to DOE. (Relevant document: CE1 PoA_6-1vortrag-iopc-2010-Frank).	Response from audit team: The attachment referred in the response has not been provided. Please provide the attachment for further review. Final response by audit team The documentary evidence submitted to support the actual situation in Indonesia mentions current handling of POME and EFB. It indicates that there are more than 50 full scale EFB/POME composting plants together in Indonesia and Malaysia. Based on this and the earlier submitted documentation it can be concluded that cocomposting of EFB and POME is scarcely practiced in Indonesia that already had around 362 operational palm oil mills. The same is also in compliance with the actual situation or planning as described in revised PDD.
Clarification Request No. 3. Submit a valid confirmation that the proposed PoA is a voluntary action by the coordinating/managing entity (DNA approval).	A.2.5	A confirmation from the Indonesian DNA that the coordinating entity participated voluntarily in the proposed PoA development inexplicitly shown from the statement "The Republic of Indonesia (that includes all stakeholders in Indonesia e.g. the PoA coordinating entity) participates voluntarily in the Clean Development Mechanism". Therefore, the LoA from the Indonesian DNA could be	The LoA has been provided by the CME and suffices the requirement for this Clarification request.

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		substantiated a valid confirmation for the voluntary action by the coordinating entity from the DNA.	
Clarification Request No. 4. Letter of authorization & letter of approval needs to be provided from Indonesian DNA and Swiss DNA respectively.	A.3.2	One letter of authorization and approval from Indonesian DNA has been submitted. While for the letter of authorization and approval from Swiss DNA is still under process.	LoA from host country (Indonesia) has been provided and verified. Please provide us the LoA from Swiss DNA as well.
		Second Response: LoA from Swiss DNA has been issued on 24 th June 2010 and the document has been submitted to DOE.	Response from audit team: LoA from Swiss DNA has been
		(Relevant documents: PoA Composting_LoA Buyer).	provided by the CME.
Clarification Request No. 5. Please submit MoC to DoE.	A.3.4	MoC will be submitted to DOE.	☑ Please provide us the MoC.
		Second Response:	'
		MoC will be submitted to DOE.	Response from audit team:
		(Relevant document: PoA_MoC)	Referred attachment, "PoA_MoC", has not been
		Third Response:	submitted to the audit team.
		MoC between PT. CPI and South Pole has been submitted to DOE.	Final response by audit team:
		(Relevant dcoument: CE2 PoA Composting_MoC_PT. CPI and SP).	MoC of the PoA has been submitted to the DOE. Therefore the issue can be closed.
Clarification Request No. 6.		Confirmation will be submitted to DOE.	Ø
Please provide confirmation of the incorporation of PT.CPI in Indonesia as per local regulations. Also confirm the date of such incorporation in the PDD.		Second Response: Confirmation will be submitted to DOE. (Relevant document: PoA_PT CPI Incorporation)	As requested, please submit the confirmation of the incorporation of PT. CPI and include the date of its incorporation in the PoA-DD.

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		Third Response: Date of the incorporation of PT. CPI as per Indonesia regulation was on 24 August 2010. This confirmation has been provided in the PoA-DD section A.4.3. Documentary evidence has been submitted to DOE. (Relevant document: CE3 PoA Composting_PT CPI Incorporation).	Response from audit team: Referred attachment, "PoA_PT CPI Incorporation", has not been submitted to the audit team. Final response by audit team: Based on the local regulations in Indonesia the legal incorpora- tion of the PT.CPI happened on 24 th August 2010. The legal document related to the same has been witnessed. The issue therefore has been closed.
Corrective Action Request No.2. Please include technical description of the small-scale programme of activities in section A.4 of the PDD. Also add the coordinate range of the Host country in section A.4.1.2 that enables a clear definition identification of the boundary for the PoA in terms of a geographical area, within which all CPAs included in this PoA will be implemented.	A.4.1.1	Technical description has been clearly described in the PDD section A.4.2.1. The coordinate range oc Indonesia is between the latitude of 6° North Latitude to 11° South Latitude and the longitude 97° to 141° East Longitude. This information has been added in the PoA DD section A.4.1.2. page 5. Second Response: Section A.4 has been updated to include technical description of the small scale PoA.	Coordinate Range has been included. Technical description has also been updated in section A.4.2.1, however as requested – please include technical details in section A.4 as well (UNFCCC PoA-DD form shows >> in section A.4, hence it has to be filled).
		Third Response: GPS format in the PoA DD section A.4.1.2 page 6 has been updated as per the latest UNFCCC format.	Response from audit team: Appropriate PoA information has been updated in section A.4. However, please update

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		Fourth Response: Link has been corrected.	the GPS format as per the latest UNFCCC acceptable format (to be in decimal format with +/sign).
			Final response by audit team: With all the technical description and a clear definition identification of the boundary for the PoA of the small-scale programme of activities, section A.4 of the PDD is now complete.
Corrective Action Request No.3. Although it has been indicated in section A.2 of the PDD that there are no mandatory policies or regulations for composting or co-composting wastes from Palm oil mill, please include the information in A.4.3 on all applicable national and/or sectoral policies and regulations which are relevant to the PoA.	A.4.3	There are no applicable national or sectoral policies and regulations which are relevant to the PoA in the host country. Applicable documents which are relevant to the PoA only the regulations related to Palm Oil Mill as following: - Regulation of the State Minister of Environment_No_11_Year_2006, Environmental Impact Assessment	All the referred regulation have been provided and mentioned in the PoA-DD, however, please provide us the official translation or summary of these referred regulations. Response from audit team:
		 Decree of the State Minister of Environment_No_51_Year_1995, Liquid Waste Standards for Industrial Activities Government Regulation_No_41_Year_1999, Air Pollution Control 	Official translation or summary of the referred attachment has not been submitted to the audit team.
		Decree of the State Minister of Environ- ment_No_111_Year_2003, Guidelines of Re- quirements, Permit Procedures and Study for Wastewater Disposal into Water or Water Re-	Final response by audit team: A translated summary is provided for each of the five environmental regulations applica-

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sources

 Decree of the State Minister of Environment_No_13_Year__1995, Quality Standards for Stationary Source Emission

These regulations have been added in section A.4.3 of the PoA-DD. However, the mentioned applicable regulations do not specifically govern the proposed PoA development. All entities that would like to develop palm oil mill in Indonesia must follow those regulations with no exception.

All documentary evidences have been submitted to DOE.

Second Response:

All documentary evidences with translation in English will be submitted to DOE.

Third Response:

All documentary evidences (Indonesian language) with English summary have been submitted to DOE:

- CD2 Decree Minister of Environment _No_11_Year_2006 EIA
- CD1 Decree Minister of Environment _No_51_Year_1995 Wastewater standard
- CD4 Decree Minister of Environment
 _No_111_Year_2003 Guidelines Wastewater
- CD3 Government Regulation_No_41_Year_1999
 Air Pollution
- CD5 Decree Minister of Environment No_13_Year_1995, Quality Stationary Emission

ble for palm oil mills in Indonesia. It was verified that each of the regulation deals with EIA, Liquid wastes/ Waste water, Air pollution and stationary sources of emissions and are not specific to composting or cocomposting EFB/POME. A review of the submitted evidences indicates that the PoA will implement a voluntary coordinated action that would not be implemented in the absence of the PoA. Therefore the issue remains closed.

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Corrective Action Request No.4. Please provide us the referred evidence in footnote 6 of PoA-DD to the DOE. Also submit a clear evidence of the technology or	A.4.2.1	The generalised scenario existing prior to start of PoA and detail on baseline scenario has been added in PoA DD section A.4.2.1	 Documents corresponding to footnote-6 (updated to 7) has been provided and verified.
measures that are to be employed by the SSC-CPA. Please confirm whether the project technology is likely to get substituted by other or more efficient technologies within the project period.		Second Response: The generalised scenario existing prior to start of PoA and detail on baseline scenario has been added in PoA DD section A.4.2 and not in the section A.4.2.1.	It is still not replied whether the technology is likely to get substituted by other or more efficient technologies within the project period.
		The project technology will not get substituted by other or more efficient technologies within the project period. Only the equipment, when needed (for instance when the old equipment is out of order), will be eventually replaced by more recent equipment available at that time. This information has been added in the PoA DD section A.4.2.1 page 7.	Response from audit team: It has been transparently documented in the PoA-DD that the technology shall not be substituted during the project period.
Corrective Action Request No.5. Please indicate the type and category of the project activity in section A.4.2.1 of the PoADD.	A.4.2.2	Type and category of the project activity has been added in the PDD section A.4.2.1	☑ Type and Category has now been included in section A.4.2
Clarification Request No. 7. Please indicate whether the implementation of the project activity require any technology transfer from Annex-I-countries to the host country.	A.4.2.4	Most of the composting technologies used in the host country come from Annex-I countries or non Annex-I countries. This statement has been added in PoA-DD section A.4.2.1.	It has been indicated in the PoA-DD that CPA may require technology transfer from Annex-1 countries (this shall be confirmed for all the CPAs separately)
		At PoA level it is not possible to detail if the technology employed will be provided by an Annex-I country or not.	

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Clarification Request No. 8. Please clarify whether the project requires extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period.	A.4.2.9	Constructing and operating a composting project carries risks for the project developer since this project entity does not have usually previous experience with the operation of an aerated composting plant, and will require new skills and know-how for its proper operation. The project entity is required to organize training for its staff that will operate and maintain the machinery. The training includes preventative maintenance, repair, overhaul, et cetera, will be organized in collaboration with the technology provider. Additionally, training on compost production management will also be required. This statement has been added in PoA-DD section A.4.2.1.	It has been clarified by the PP that training would be required at CPA level for technical understanding & management.
Clarification Request No. 9. Please submit information on the demand and requirements for training and maintenance that have been identified to be necessary with reference to the technology/ies.	A.4.2.10	See CR8.	Required training has been identified by PP's and is also mentioned in PoA-DD
Clarification Request No. 10. Project implementation schedule needs to be submitted to the DOE	A.4.2.11	Project implementation schedule showing prior consideration of the proposed SSC-PoA until its development is provided in section A.4.3 of the PoA-DD.	Please submit the documentary evidences to support the events mentioned in implementation schedule of PoA-DD (pg-10).
		 Second Response: List of documents: Preliminary discussion between EcoSecurities and South Pole about takeover some of EcoSecurities' projects. This document will be submitted to DOE. South Pole board decision to undertake a composting PoA in Indonesia. This document will be 	Response from audit team: None of the documents referred in the response has been submitted to the audit team. Further response by audit

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- Termination of Fetty Mina co-composting projects by EcoSecurities which are under validation with DNV. This document has been submitted to DOE.
- Novation agreement signed between South Pole and EcoSecurities for several co-composting projects. This document will be submitted to DOE.
- PT. CPI is incorporated as per Indonesian regulations. This document will be submitted to DOE.

Third Response:

The documentary evidences to support the events mentioned in implementation schedule of PoA-DD (pg-10) have been submitted to DOE.

List of relevant documents:

 Preliminary discussion between EcoSecurities and South Pole about takeover some of EcoSecurities' projects. This document has been submitted to DOE

(Relevant document : CE4 PoA Composting Preliminary Discussion SP – ES)

South Pole board decision to undertake a composting PoA in Indonesia. This document has been submitted to DOE

(Relevant document : CE5 PoA Composting SP Board Decision)

 Termination of Fetty Mina co-composting projects by EcoSecurities which are under validation with DNV. This document has been submitted to

team:

- 1. The extracts of emails dated in June and Dec. 2008 are indicative of some communications between South Pole and EcoSecurities regarding Fetty Minajaya amongst others. Apparently South Pole then made a proposal to the EcoSecurities on dealing with the Fetty Minajaya project however a concrete decision from EcoSecurities is not clear. Furthermore the document "CE4 PoA Composting_Preliminary Discussion SP - ES" is not including any date such as March 2008 included in the table of A.4.3 against this event. Please make it further transparent.
- 2. The extract of minutes of the meeting dated 09 June 2008 indicates an internal decision (to commit internal resources) taken by South Pole to takeover 6 co-composting project activities from EcoSecurities and restart CDM as PoA or a bundle. Please note that any

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DOE.

(Relevant document : CE6 PoA Composting Tripartite Termination)

 Novation agreement signed between South Pole and EcoSecurities for several co-composting projects. This document has been submitted to DOE

(Relevant document : CE7 PoA Composting_Novation Agreement SP – ES)

Fourth Response:

1. Communication between Eco Securities and South Pole has been on-going orally from March 2008 onwards. As the communication was orally, no documentary evidence is available. Hence, the exact date is excluded from the timeline. The first written confirmation is from early June 2008 referring to previous discussion. The same mail refers to a draft NDA showing some serious discussion before hand in order to agree on a draft NDA. At the start date of the PoA. no contract for the take-over of Eco Securities projects have been signed yet but the outlook to a positive project take-over agreement together with internal South Pole leads and the overall market potential (see PoA-DD section A.2) made the management committee of South Pole enough comfortable to decide upon the implementation of the Co-composting PoA. At that time the first CPA has not yet been clearly defined. (Relevant document: CE4 PoA Composting Preliminary Discussion SP - ES and DB1 PoA start signed) documentation that can be accepted to support the start date shall prove in itself that it was really the earliest date with financial commitments from the project proponent. Therefore please submit further strong evidence to support the indicated start date (09th June 2008) as per Glossary of CDM terms.

- The document "CE6 PoA Composting_Tripartite Termination" is not including any date such as 16th October 2008 included in the table of A.4.3 against this event. It appears the termination deed was made on 03rd September 2009. Please make it further transparent.
- 4. The agreement including EcoSecurities and Swiss Carbon Assets Ltd. signed on 26 May 2009 refers to Fetty Minajaya among 5 composting projects. Please make it transparently clear in PDD how Swiss Carbon Assets Ltd. is related to South Pole since only the

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Further confirmation has been sent giving explanation on the format of the management committee of South Pole, the PoA starting decision on 9 June 2008 and related discussions with Eco Securities. Contact details of the person in charge from Eco Securities side has been provided to confirm that discussions on project take-overs have been on-going before and after the PoA start date. Please also refer to the above answer under 1.. (Relevant document: DB1_PoA_start_signed).

- 3. The Tripartite Termination Deed between Eco Securities, Fetty Mina and South has been signed on 3 September 2009. However, Eco Securities terminated the validation contract with DNV on 16 October 2008 by sending a withdrawal letter to DNV. This can be considered as termination of the CDM consulting services provided by Eco Securities to Fetty Mina. (Relevant documents: DC3 FMJ_Withdrawal letter to DNV_Oct08 and CE6 PoA Composting_Tripartite Termination).
- Swiss Carbon Assets Ltd. is a sister company of South Pole Carbon Assets Management Ltd. (both companies belong to South Pole holdings, relevant document: DB2_confirmation_SVC_SPCAM_mc and DB3 SP Holding Structure)

latter is associated with current programme (PoA).

Final response by audit team:

- 1. The date of March 2008 has been excluded from the timeline in POA-DD to avoid confusion to the reader.
- 2. In addition to the extract of minutes of the meeting dated 09 June 2008 the PP has also submitted contact details from Ecosecurities side with Ms. Augus Sari as the contact person. Therefore 09/06/2008 is the 1st real action with significant financial expenditures (as requested by us in the previous round.
- 3. For transparency sake, the date (3 September 2009) when the Tripartite Termination Deed between EcoSecurities, Fetty Mina and South Pole has been signed is included in table of A.4.3.
- 4. It is evident from the holding structure submitted to DOE that Swiss Carbon Assets
 Ltd. is a sister company of South Pole Carbon Assets

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			Management Ltd. (both companies belong to South Pole holdings) and any one can be authorized to sign an agreement. Therefore the issue remains closed.
Corrective Action Request No.6. Please include an eligibility criteria with regards to baseline scenario and also clarify whether projects can be bundled or not under this PoA.	A.4.2.12	Eligibility criteria on baseline scenario has been added to A.4.2.2 No bundle will be allowed under the PoA, there will be only one composting plant per CPA allowed. Second Response: Emission reduction from EFB can only be claimed if EFB is disposed in dumping site. Eligibility criteria have been revised accordingly.	Eligibility criteria have been updated to include the baseline scenario & doesn't allow bundling. However the applied methodology only allows project activity where organic matter are left to decay in the absence of the project, whereas the eligibility criteria in PoA also includes project where EFB are burnt, please clarify. Response from audit team: Eligibility criteria has been updated to exclude the baseline scenario where EFB has been burnt or land applied.
Corrective Action Request No.7. Please provide justification to substantiate that this voluntary coordinated action would not be implemented in the absence of the PoA. Further, PP needs to include information on CDM consideration prior to implementation of PoA and provide evidences for the same. A separate time line for activities re-	A.4.3.2	Because the PoA is a long-term programme and each CPA a project, the PPs have chosen to demonstrate additionality at CPA level (paragraph 73 of the 47 th EB meeting report) which will guarantee the environmental integrity of each CPA at the time of inclusion of each CPA.	The voluntary coordinated action – implementation of Composting project shall be assessed at CPA level at the time of inclusion. Please refer to CR10

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lated to project implementation and CDM	First paragraph of section (ii) of A.4.3 has been there-	Response from audit team:
related activities needs to be incorporated.	fore deleted to reflect this point.	Please refer to CR10. Issue car be closed subsequent to closure of CR 10.
	Third Response:	
	All relevant documents under CR10 have been submitted to DOE	Further response from audit team:
	Fourth Response: CR-10 clarification was provided above. PoA start date was defined at 9 June 2008, where as the CPA start date is defined at 6 March 2009. Please refer to answers given in CR 10 and the CPA-DD showing both, the timeline of CDM related activities and the project implementation, and its underlying documents showing prior consideration of CDM of the project activity.	The PP is requested to refer to section C of guidelines on prior consideration (EB 60 Annex 26). Proposed project activities with a start date before 2 August 2008, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, are required to demonstrate that the CDM was seriously considered in the decision to implement the project activity.
		Therefore PP still needs to include information on CDM consideration prior to implementation of PoA referring to this guidance and provide suitable evidences to DOE for the same Also a separate time line for activities related to project implementation and CDM related

activities needs to be incorporated. Furthermore this issue

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			can be closed subsequent to closure of complete CR 10.
			Final response by audit team: Based on documentation submitted finally and the response provided for CR 10 it can be confirmed that all the documentary evidences corresponding to timeline (table 2) mentioned in CPA-DD for prior consideration have been submitted. Therefore the prior consideration has been established.
Clarification Request No. 11. It needs to be clearly stated in section A.4.4.1 of PDD the responsible entity for implementation of monitoring plan.	A.4.4.1	This point is clearly detailed in Table 1 from section A.4.4.1, it is the CPA owner that is responsible for implementing of the monitoring plan.	Table-1 describes the role of management entity & CPA implementer appropriately. Cooperation agreement with PT.CPI (CME) and FMJ (the first CPA owner) constitutes the ERPA, its amendments and term sheet, includes this information.
Clarification Request No. 12. Please provide the draft excel database referred in "recording keeping system" of PoADD which would be used to record details for each CPA	A.4.4.2	Record keeping system is being provided. The file gives an overview of all composting CDM activities (PoA, SSC and CDM) in Indonesia.	☐ The record keeping system has been provided and verified.
Corrective Action Request No.8. Please include all the criteria for de-bundling check in PoA-DD (section A.4.4.1) as men-	A.4.4.4	All the criteria for de-bundling check has been revised in PoA-DD section A.4.4.1 page 11, according to "Guidelines on assessment of de-bundling for SSC project ac-	☑ De-bundling criteria has been updated as per "Guidelines on

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tioned in "Guidelines on assessment of de- bundling for SSC project activities", EB 47 annex 32.		tivities", EB 54 annex 13.	assessment of de-bundling for SSC project activities"
Corrective Action Request No.9. Please use "General Guidelines for sampling and surveys for small scale CDM project activities", EB50 annex 30, for proposing a sound sampling method in PoA-DD for verification. Also provide us the ISO guidance referred in the PoA-DD for sampling	A.4.4.6	The sampling method is based on the stratified random sample methodology described "General Guidelines for sampling and surveys for small scale CDM project activities", EB50 annex 30. Second Response: The PPs have opted for a sampling approach as offered in paragraph 6 (k) of EB55 annex 38 As per CDM guidance, precision and level of confidence will be done according to the 90/10 principle. This point has been added to the sampling plan. Reference to ISO has been deleted	 Please clarify the following points with respect to sampling: Please include the justification for the selected chosen sampling approach. Please clarify what shall be the precision & level of confidence of the proposed sampling plan. Please discuss the applicability of the respective ISO clauses in the sampling plan Response from audit team: The sampling approach described by PP is acceptable at POA validation and is valid only until the EB has developed and approved a "guideline containing criteria for determining statistically sound verification techniques and methods".
Corrective Action Request No.10. 1. It is stated in the PDD that the PT.CPI (coordinating entity) will implement a sampling procedure to be used by the DOE during verification while keeping	A.4.4.7	1. The PPs have voluntarily not defined criteria on whether to individually verify a CPA or not. This choice will be done freely by the CME before each verification based on its own assessment and its own will. Anyway, the level of accuracy of the proposed sampling ap-	1. Please transparently mention the criteria to determine which CPA shall be individually verified. Please include

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with itself the option to verify individually some CPAs. Please describe in detail the criteria that shall be applied/ used to determine a CPA's suitability to be sampled or verified individually.

As each CPA is expected to have different characteristics and verification periods, please describe clearly a transparent system to ensure that no double accounting occurs and that the status of verification can be determined any time for each CPA

proach is independent from the number and the nature of the CPAs that are verified individually. There is therefore no reasons to pre-define in the PoA how the CME will select the CPAs to be verified individually.

As per footnote 2 of the Annex 38 EB 55, the sampling approach described below is temporary and is valid only until the EB has developed and approved a "guideline containing criteria for determining statistically sound verification techniques and methods".

2. The verification status of each CPA will be part of the record "record keeping system" where will be reported the verification status of each CPA for all monitoring report.

Third Response:

Choice whether to include each SSC-CPA into the sampling group or to verify it individually will be determined on case by case basis before each verification. Indeed it is not possible to predict ex-ante how the SSC-CPAs that need to be verified individually or not will be chosen. This will depend on many factors that cannot be anticipated.

As a rule, individual verification will occur:

- 1. For the first verification of a SSC-CPA
- 2. Following some exceptional circumstances (SSC-CPAs being damaged, change of operator...)
- 3. If required by the carbon credits buyer of the SSC-CPA.

the same in PoA-DD.

"Record keeping system" has been provided by the PP and the same has been verified and accepted.

Response from audit team:

Since CME shall do its own assessment to choose the CPA for individual verification, it is requested to pre-define the criteria for this assessment to substantiate the sampling approach for verification.

Final response by audit team:

- The PDD describes in detail the criteria that shall be applied/ used to determine a CPA's suitability to be sampled or verified individually.
- 2. To ensure that no double accounting occurs and that the status of verification can be determined any time for each CPA a "Record keeping system" has been provided by the PP and the same has been verified and accepted.

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Clarification Request No. 13. It has been stated that the Composting PoA Indonesia has not received any public funding for the project activity however, it is also stated that CPAs with individual public funding can be included. Please clarify this contradiction.	A.4.5.1	The PoA does not receive any public funding and the PoA-DD has been revised accordingly.	It has been clarified by PP that PoA has not received any public funding, and the PoA-DD has been updated accordingly.
Clarification Request No. 14. The PP is requested to submit a suitable evidence of the assumed start date of PoA i.e 22 June 2007, DoE.	B.1.1	Star date of PoA has been changed to 6 November 2008. This date is the termsheet between South Pole and Fetty Mina Jaya (1st CPA proposed to this PoA). This is the first real action undertaken for this PoA and can be considered as project start date of the PoA. Second Response: The termsheet between Southpole and Fetty Mina Jaya has been submitted to DOE. (Relevant document: FMJ_Termsheet FMJ and SP) Third Response: Start date of PoA has been changed to 9 June 2008, as date of South Pole board decision to commit internal resources to develop the PoA. This is the first real ac-	Please provide us the termsheet between Southpole and Fetty Mina Jaya referred in the response. Response from audit team: As per PoA-DD, CME has considered 9 th June'08 as starting date (Southpole's decision to undertake PoA), whereas the response refers to 6 th Nov'08. Please clarify this inconsistency & provide the supporting documents for these dates (the referred document "FMJ_termsheet FMJ and SP"
		tion undertaken for this PoA and is considered as project start date of the PoA. Documentary evidence has been submitted to DOE. (Relevant document: CE5 PoA Composting_SP board decision). Fourth Response:	has not been provided"). Further response by audit team: The extract of minutes of the meeting (SP board decision) dated 09 June 2008 indicates

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		Further confirmation has been sent giving explanation on the format of the management committee of South Pole, the PoA starting decision on 9 June 2008 and related discussions with Eco Securities. Contact details of the person in charge from Eco Securities side has been provided to confirm that discussions on project take-overs have been on-going before and after the PoA start date. Please also refer to answers of CR10 explaining that the PoA implementation initially started independently of the first CPA. The PoA has been developed solely by South Pole Carbon with no external third party involved. For the "Starting date of the CDM programme activity (CPA)" according to the Glossary of CDM term, please refer to the CPA-DD and the documentary evidence. (Relevant document: DB1_PoA_start_signed).	an internal decision (to commit internal resources) taken by South Pole to takeover 6 cocomposting project activities from EcoSecurities and restart CDM as PoA or a bundle. Please note that any documentation that can be accepted to support the start date shall prove in itself that it was really the earliest date with financial commitments from the project proponent. Therefore please submit further strong evidence to support the indicated start date (09th June 2008) as per Glossary of CDM terms. Further response by audit team: The extract of minutes of the meeting dated 09 June 2008 further strengthens the argument PP's argument towards significant financial commitments.
Corrective Action Request No.11. Documentation on the analysis of the environmental impacts, including trans-boundary impacts shall be included in the section C.2. It needs to be clearly indicated in section C.2 whether there are any Host Party require-	C.2.1	Since the PPs have chosen to perform the environmental analysis at CPA level (see section C.1) the analysis of environmental impacts, including transboundary impacts, will be conducted at CPA level.	☑ It has been clarified by PP that Environmental Analysis shall be done at CPA level.

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ments for an Environmental Impact Assessment (EIA), and if yes, whether an EIA been approved.			
Clarification Request No. 15. Please provide us with the government regulation for EIA that is quoted as footnote 11 of PoA-DD- "Government Regulation of PP No. 11/2006 lays out requirements for EIAs".	C.3.1	Documentary evidence of the government regulation of PP No.11/2006 has been submitted to DOE. Second Response: Government regulation of PP No.11/2006 with translation in English has been submitted to DOE. (Relevant document: PoA Composting_PP No 11/2006). Third Response:	Please refer to CAR-3 above. Response from audit team: Referred document in the response is in Bahasa. Please provide the official translation or summary to the audit team.
		Government regulation of PP No.11/2006 with translation in English has been submitted to DOE. (Relevant document: CD2 Decree Minister of Environment_No_11_Year_2006 EIA).	Final response by audit team: A translated summary is provided for EIA regulation applicable for palm oil mills in Indonesia and it was verified that the regulation deals is not mandatory. Therefore the issue remains closed.
Clarification Request No. 16. Please clarify and include in PoA-DD whether stakeholder consultation process is required by regulation/laws in the host country. If yes, please document how this stakeholder meeting has been carried out as per the regulations/laws.	D.2.3	No stakeholder consultation at PoA level is required by laws/regulations. The stakeholder consultation followed the procedures of "CDM Project Approval Mechanism" by the Indonesian CDM National Commission and published in the Indonesia DNA website. In the procedures, the project proponent (or together with consultant) prepares application documents that	It has been clarified that local stakeholder consultation will be conducted at CPA level as per procedures specified by DNA.

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Corrective Action Request No.12. This section (section E) shall justify and demonstrate the application of the baseline and monitoring methodology to a typical SSC-CPA. The information defines the PoA specific elements that shall be included in preparing the PoA specific form used to define and include a SSC-CPA in this PoA (PoA specific CDM-SSC-CPA-DD). Also please indicate the title of the applied methodology in section E.1 of the PoA-DD.	E.1.1.1	consist of: (i) the National Approval Application Form, which includes explanation about the project proposal's conformability to criteria of Sustainable Development; (ii) Project Design Document; (iii) EIA report (where required); (iv) notes of public consultation; (v) recommendation letter from Ministry of Forestry, only for forestry CDM project proposal, and; (vi) other supporting documents to justify the project. Then the application documents are submitted to the Secretariat to be processed. Besides meeting the DNA requirements, the stakeholder consultation organized was also to inform and increase awareness among national stakeholders e.g. national NGOs, government representatives, etc, which mostly resided in Jakarta. Procedure of CDM Project Approval Mechanism can be found at website: http://dna-cdm.menlh.go.id/en/approval/ The title of the AMS-III.F version 8 has been added in PoA-DD section E.1 page 17.	Eligibility criteria of the CPA-DD has been updated to retest the baseline scenario at CPA level. Further section E.1 has been updated to include the title of the applied methodology.
Corrective Action Request No.13. Please clarify in PoA-DD whether the PoA would involve CPA's where equipment is transferred from another activity or if the ex-	E.2.2	In the eligibility criteria point 1 is clearly stated that CPA to be included in the proposed PoA shall be a newly developed composting plant producing compost and will use brand new equipment.	☑ It has been clarified by CME that PoA would not involve any CPA with equipment transfer.

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isting equipment is transferred to another activity (in context of leakage). Please include the same in PoA-DD for transparency.			
Corrective Action Request No.14. Please correct the applicability criteria 1 in the PDD (This methodology comprises measures to avoid the emissions) as per the methodology. Also submit reliable evidence to prove for the PoA the following: In the absence of the project activity EFB are left to decay anaerobically in a solid waste disposal site for each CPA under this SSC-PoA.	E.2.2.1	PoA-DD has been revised in section E.2 table 3 page 17 at point no.1.	Applicability & eligibility criteria have been updated. As per the updated criteria existing scenario for each CPA would be assessed at CPA level. Further, please refer to CAR-12.
Corrective Action Request No.15. Please correct the Applicability criteria 2 in the PDD (The project activity does not recover or combust landfill gas from the disposal site) as per the methodology, AMS-III.F ver8.	E.2.2.2	PoA-DD has been revised in section E.2 table 3 at point no.2.	Applicability criteria have been updated as per the applied methodology.
Corrective Action Request No.16. Please discuss the applicability criteria 4, 7, 8 as per AMS-III.F ver8 in PoA-DD. Also submit reliable evidence to prove the criteria 4.	E.2.2.4	All the applicability criteria mentioned in AMS-III.F ver8 have been added in PoA-DD section E.2 table 3	All the applicability criteria of AMS-III.F have been included in the PoA-DD.
Corrective Action Request No.17. Please discuss the applicability criteria 5 in the PDD, as per AMS-III.F ver8 in PoA-DD. Also submit reliable evidence to prove the same.	E.2.2.5	All the applicability criteria mentioned in AMS-III.F ver8 have been added in PoA-DD section E.2 table 3	It has been clarified that only new Composting plant shall be included in the PoA, hence capacity addition is not applicable.
Clarification Request No. 17. 1. Please submit reliable evidence to prove criteria 6 for the PoA the following: In the	E.2.2.6	All applicability criteria have been added to section E.2. In order to meet the eligibility criteria of AMS-III.F, sev-	☑1. This criteria has been included in the eligibility criteria

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absence of the project activity EFB are left to decay anaerobically in a solid waste disposal site for each CPA under		eral CPA eligibility criteria have been added to section A.4.2.2.	and hence shall be checked for each & every CPA under this PoA
this SSC-PoA. 2. A confirmation shall be included with		Second Response:	2. PoA-DD has been updated to include criteria 6 of AMS.III.F.
reference to the later part of § 6 of AMS. III.F.		Applicability criteria of § 4,6 and 7 of AMS.III.E have been included in the PoA-DD section E.2.	3. § 4, 6 and 7 of AMS.III.E has still not been included in the
3. A transparent discussion on relevance of § 7 of III.F and also § 4, 6 and 7 of AMS.III.E shall be included in this section			PoA-DD, please incorporate the same.
of the PDD.			Response from audit team: PoA-DD has been updated to include the relevant criteria from AMS.III.E as per applied methodology, AMS.III.F.
Corrective Action Request No.18. Please clarify why project emission from composting in table 4 has not been considered. Further, project emission from Electricity is not considered as an emission source in table 4 and figure 3, please clarify	E.3.2	Project emissions from composting and electricity are considered as emission sources. PoA-DD has been revised in table 4 section E.3 page 19.	☐ Table 4 of PoA-DD has been updated to include project emissions from composting and electricity consumption.
Corrective Action Request No.19. Please include the description with steps as to how baseline scenario has been identified for CDAs in section F. 4 of DoA. DD. Also pre-	E.4.1	The baseline scenario is identified as the simplified modalities described in the baseline section of AMS-III.F as the continuation of the actual waste management practice at the palm sill site.	☑ Please refer to CAR-6
for CPAs in section E.4 of PoA-DD. Also provide documentary evidences to substantiate		tice at the palm oil mill site.	Response from audit team:
the identified baseline scenario.		In order to recheck the validity of the identified baseline scenario for each CPA, the compliance of the identified baseline scenario with local law and regulations has	An eligibility criterion (v) of PoA- DD has been updated to only include CPAs where EFB are dumped in the baseline sce-

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Corrective Action Request No.20. Please justify in section E.4 of PoA-DD	E.4.6	Second Response: Eligibility criteria have been revised in point v. Please see the explanation in CAR-6. Justification of the identified baseline scenario is in line with regulatory or legal requirements have been added	☑ Eligibility criteria of PoA-DD
whether the identified baseline scenario is in line with regulatory or legal requirements		as eligibility criteria of the CPA under the PoA.	have been updated to include a check whether the baseline scenario is in line with legal requirements or not.
Corrective Action Request No.21. Please include criteria for demonstrating prior consideration of CDM in section E.5.1 for CPA whose start date is before the GSP of PoA-DD.	E.5.2	 The PoA is limited to two types of projects: CPAs that are terminated composting CDM activities from EcoSecurities CPAs that will be included later on in the PoA but for which the project start date shall be after PoA validation start (22 December 2009). The limitation of the PoA to these two type of activities will ensure that the CDM has always been considered as per EB guidance. 	CPAs that have terminated CDM activities from Ecosecurities may require prior consideration of CDM (because start date of CPA may be before GSP of PoA). Therefore please refer to EB49, annex22 for such CPAs.
		Second Response: Documentary evidence of CDM prior consideration of terminated CDM activities from Ecosecurities has been submitted to DOE. Third Response:	Response from audit team: Please update the PoA-DD to include prior consideration of CDM as one of the criteria to demonstrate additionality of the CPA (this will be applicable to all the projects having start date before GSP of PoA – the list of such CPA has been submitted
		PoA-DD has been updated in the section E.5.1. to include prior consideration as one of the criteria to demonstrate additionality of the CPA.	to EB). Final response by audit team:

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			Section E.5.1 now includes criteria for demonstrating prior consideration of CDM for CPA's whose start date could be before the GSP of PoA-DD.
Clarification Request No. 18. As per the stated baseline scenario, implementation of project activity would avoid anaerobic treatment of POME and EFB, thereby avoiding some operational and management expenses. Please clarify why this parameter has not been taken into consideration as an income source.	E.5.2	Operational and management costs associated to the baseline scenario cannot be considered as avoided costs and shall not be added to the financial analysis. Second Response: Additionality is proven by applying a benchmark analysis. Such includes a project IRR calculation which is compared to a suitable benchmark IRR. As per "GUIDE-LINES ON THE ASSESSMENT OF INVESTMENT ANALYSIS (Version 3)", paragraph 9, "The purpose of the project IRR calculation is to determine the viability of the project to service debt". A more precise definition is given in "Wall Street words: an A to Z guide to investment terms for today's investor" defining an IRR as: "The rate of discount on an investment that equates the present value of the investment's cash outflows with the present value of the investment's cash inflows. Internal rate of return is analogous to yield to maturity for a bond". Hence, the calculation is done on an investors point of view, looking at direct revenues and direct costs of the investment which includes O&M costs of the project activity but excludes O&M costs from the baseline activity as it is not a direct project revenue. Neither in the additionality tool nor in the guidelines on the assessment of investment analysis the inclusion of indirect costs/revenues into the project IRR calculation are requested or mentioned.	It is still not clarified from the response as to why the O&M cost of the baseline scenario would not be avoided by the project activity. Response from audit team: It cannot be justified from the response as to why O&M cost can be excluded. Further, EB follows the path of gradual improvement, if a clarification has not been asked by EB in this perspective does not guarantee their acceptance on this aspect. Response from audit team: Avoided operational and management expenses in the baseline are addressed in the CPA-DD of Fetty Minajaya. However the same criterion needs to be confirmed for each CPA by an

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To cross check the interpretation of a project IRR calculation the UNFCCC pipeline shall be consulted. Since the EB published the last version of "GUIDELINES ON THE ASSESSMENT OF INVESTMENT ANALYSIS (Version 3)" on 4 December 2009 four projects applying AMS III.F have been registered or requested registration (ref. no. 2727, 3379, 3221, 3154). All of them do not include any indirect costs / revenues which clearly indicates the position of the EB.

Reference: Wall Street Words: An A to Z Guide to Investment Terms for Today's Investor by David L. Scott. Copyright © 2003 by Houghton Mifflin Company. Published by Houghton Mifflin Company.

Third Response:

Disposal of EFB in a dumpsite is very cheap and simple. The only cost needed is for transportation cost which is typically using the existing transport equipment from the mill. There is no additional investment for EFB treatment.

POME usually treated in a series of open lagoon system. POME flows from one pond to another by gravity which makes the operation cost are minimal. Such costs were included in the company palm-oil mill operations, as part of overall mill maintenance worker division.

Therefore O&M costs of the baseline cannot be separated from typical mill operations, and not being considered in the composting project itself.

This costs is considered minor, nevertheless for conser-

inclusion in E.5.2 of PoA-DD.

Final Response from audit team:

The final justification given by PP on the issue can be considered reasonable and accepted. Avoided operational and management expenses shall be included in the sensitivity analysis of upcoming CPAs.

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		vative assessment: in CPA-DD section B.3 – Table 5 Sensitivity Analysis (O&M reduction) it is described this avoided costs would represent only 1.27% of the project annual O&M costs. (Relevant document: CC1 PoA Avoided Cost EFB and	
		POME.xls)	
		Fourth Response: In the CPA-DD, the avoided O&M costs (<1.5% of project O&M costs) were represented in the Sensitivity Analysis and considered as conservative (see closed CR12 of CPA-DD). The avoided O&M costs will be included in the sensitivity analysis of upcoming CPAs as part of the +/- 10% O&M cost variation as potentially avoided O&M costs contribute to <1.5% of total O&M costs. Such comment has been included in the PoA-DD and CPA-template.	
Clarification Request No. 19. Please clarify which approach would be followed to be prove the 'investment barrier' as per Attachment A to appendix B.	E.5.3	Attachment A to Appendix B allows the use of financial barriers to demonstrate additionality. Financial barrier will be demonstrated through an IRR calculation where each CPA will show that the composting activity is not financially attractive.	
		For simplification reasons, the PPs have chosen in this second version of the PoA-DD to replace the WACC by a commercial lending rate. As WACC, commercial lending rate is also a good benchmark for project IRR. Switching to commercial lending rate is more conservative (WACC is usually a little bit higher than commercial lending rate) and in the absence of WACC guidance is easier to validate.	

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Clarification Request No. 20. Please submit the standard excel worksheet developed for IRR computation which would be used by CPA for computation of IRR.	E.5.4	The standard excel worksheet developed for IRR computation that will be used by CPA for computation of IRR has been submitted to DOE. Second Response: The standard excel worksheet developed for IRR computation that will be used by CPA for computation of IRR has been submitted to DOE. (Relevant document: PoA_ER Calculation_CPA Composting_Indonesia)	Standard excel worksheet for IRR computation has still not been submitted to audit team for review. Response from audit team: Only the IRR calculation for a real case CPA has been provided, however the blank template to be used for this PoA is still not submitted.
		Third Response: The standard excel worksheet developed for IRR computation that will be used by CPA for computation of IRR has been submitted to DOE (blank template). (Relevant document: CE8 ER Calculation_CPA Composting Indonesia_template).	Final response by audit team: A standard excel worksheet has been developed for IRR computation which will be applicable for each CPA for computation of IRR. Therefore the issue can be closed.
Corrective Action Request No.22. Please include all the relevant national and sectoral policies in section E.5.2	E.5.9	All the relevant national and sectoral have been included in the PoA-PDD section E.5.2. Second Response: Because the compliance with laws and regulations is project specific, it will be checked for every CPA individually. As a consequence, compliance with sectoral policies and regulation has been added as eligibility criteria.	PoA-DD has not been updated to include the compliance of sectoral policies as the additionality criteria for CPA. Response from audit team: Compliance with laws & regulations has been included as one

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			of the eligibility criteria.
Corrective Action Request No.23. Please justify all the relevant methodological choices taken for the computation of emission reduction as per the applied methodology in section E.6.1 of PoA-DD. Explain how the procedures, in the approved project category to calculate project emissions, baseline emissions, leakage emissions and emission reductions are applied to the proposed project activity. Clearly state which equations will be used in calculating emission reductions. Explain and justify all relevant methodological choices, including: • where the category provides different options to choose from (e.g. "combined margin" under AMS I.D); • where the category provides for different default values	E.6.1.2	All the relevant methodological choices taken for the computation of emission reduction as per the applied methodology in section E.6.1 of PoA-DD have been added. Second Response: CPA is limited to the palm oil mill which is not connected to the grid electricity. This has been included in the eligibility criteria point no. xi. Documentary evidence in footnote 15 of the PoA-DD has been submitted to DOE. (Relevance document: PoA_Wet Basis TT-332)	There can also be a possibility where electricity for auxiliary power consumption is imported from grid, as per AMS-III.F, please refer to AMS-I.D for the available options (combined margin or weighted emission factor) in case of power import from grid. Also provide us the document referred in footnote 15 of the PoA-DD. Response from audit team: Eligibility criteria in section A.4.2.2 of PoA-DD has been updated to exclude projects connected to grid, hence AMS.I.D is no more applicable. Supporting documents for footnote 18 (previously 15) has been submitted.
Corrective Action Request No.24. Computation of baseline emission (BEy) is not in line with AMS III.F ver8. Please correct the formula applied as per the methodology. Also state in PoA-DD which version of "tool to determine methane emissions" has been	E.6.2.1	The formula applied for the computation of baseline emission has been revised to be in line with AMS III-F ver8 in PoA-DD section E.6.2 page 27. Methane emission for the solid waste is calculated using "tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" version 04.	All the equations have been updated as per applied methodology except for PE _{y,runoff} . Please update the parameters in PE _{y,runoff} equation as per the

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used. Also the formula for MEP _{y,ww} , PE _y , PE _{y, transp} , PE _{y,runoff} , needs correction in the PDD in		This has been included in PoA-DD section E.6.2 page 27.	methodology.
section E6.2.			Response from audit team:
		Second Response:	PoA-DD has been updated to
		Parameters in $PE_{y,runoff}$ equation has been updated as per the methodology.	include the correct equations as per applied methodology.
Corrective Action Request No.25.	E.6.2.1	1. No methane emissions are considered for anaerobic	\square
1. Please clarify in section E.6.1 why PE _{y,res} waste has not been taken into consideration as one of sources for project emission.		storage and/or disposal in a landfill of the compost, since the compost product is not stored and/or disposes in a landfill. All compost will be used directly to the plantation	Since methane emission from the residual waste has not been considered as a part of
2. As per the methodology, PE _{y,power} determines project emission from electricity and fossil fuel consumption by project activity facilities. Please clarify whether		or sell to the market.	PoA, please include in the eligibility criteria that residual waste from the composting process shall not be disposed in landfill
there will be any project emission from fossil fuel consumption apart from electricity, if yes, please incorporate the elec-		 Yes, there will be project emissions from fossil fur consumption. PE_{fuel} has already included in the calculation. 	or stored under anaerobic conditions.
tricity component in PE _{y,power} 3. Please correct final equation for project		3. Has been revised.	2. PE _{y,power} has been updated to include project emissions from fossil fuels as well.
emission in page 28 of PoA-DD to include project emission during composting (PE _{y,comp}). Please define clearly in PoA-		4. To be determined at CPA level.	3. PE _{y,comp} has been included in the project emission, however please provide us the evidence
DD how different values of EF _{composting} can		Second Response:	referred in footnote 15 for EF-
be taken based on its oxygen content (aerobic and anaerobic). Also state how it		1. Eligibility criteria have been updated (in point ix) to	composting
is monitored during the crediting period.		include residual waste from the composting process	4. Since eligibility criteria have
Confirm whether the requirement of § 32 of AMS III.F is met in the PDD		shall not be disposed in landfill or stored under anaerobic conditions.	been updated to allow only new composting plant (no increase in capacity utilization of existing
		4. CPA is a new composting plant (no increase in capacity utilization of existing composting facilities).	composting facilities), therefore this requirement is not valid for CPA under this PoA.

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			Response from audit team: Eligibility criteria of PoA-DD have been updated to avoid anaerobic decomposition of the residual waste from the project activity.
Clarification Request No. 21. Please provide us the standard Emission reduction calculation sheet which would be used for ER computation from each CPA	E.6.2.2	The standard Emission Reduction calculation sheet which would be used for ER computation from each CPA has been submitted to DOE (ER Calculation_CPA_Composting_Indonesia - not for upload.xls). Second Response: No changes in the ER calculation based on CAR 23.	Standard Emission reduction sheet which is to be used for CPAs under this PoA has been provided to the audit team. However please refer to CAR-23. Response from audit team: CAR-23 has been appropriately replied.
Corrective Action Request No.26. Please include the data unit of MD _{y,reg} as per the methodology. Please include the measurement methods and procedure which would be used for each CPA to determine this parameter in future. Also please include composting machine efficiencies, EF _{composting} , GWP _{CH4} .	E.6.3.1	The data unit of MD _{y,reg} has been added in PoA-DD section E.7.1 page 44. Changes in the legislation requirements will be monitored. This parameter has been moved from E.6.3 to the monitoring list (section E.7.1). Second Response: MD _{y,reg} will need justification of the choice of data to comply with the regulation in the host country. Parameter MD _{y,reg} in the table section E.7.1 has been revised accordingly.	MDy,reg has been included in E.7.1 as a monitoring parameter, however the measurement methods are still not described in the monitoring plan. Response from audit team: Current regulation in the host country does not provide any mandatory capture or combustion of methane. Current regula-

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Clarification Request No. 22. "Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site" states that site visit needs to be conducted for determining the oxidation factor, please clarify how this parameter would be determined for each CPA	E.6.3.2.4	OX would be determined by conduct a site visit to see the type of SWDS whether covered with material or not. Explanation has been added in PoA-DD section E.6.3 page 31.	tion shall be monitored at the time of CPA inclusion. Composting machine efficiencies, EF _{composting} , GWP _{CH4} are also included finally. PoA-DD has been updated to include site visit for determination of OX as per the applied methodology.
Clarification Request No. 23. Please submit documents mentioned in footnote 24 to substantiate the choice of value for Kj	E.6.3.2.9	The document mentioned in footnote 24 to substantiate the choice of value for Kj has been submitted to DOE.	It can be verified by the provided document that Indonesia has temperate climatic conditions with with MAT > 20°C and MAP > 1000 mm, therefore the issue can be clsoed.
Corrective Action Request No.27. Please correct the value of EF _{CO2} chosen for the PoA and also justify the same transparently	E.6.3.2.1 0	The value of EF_{CO2} has been revised. Calculation of EF_{CO2} using IPCC default value and local value.	PoA-DD has been revised to update the value of EFCO2 and the same has been mentioned transparently now.
Corrective Action Request No.28. The parameter U _{b,baseline} and U _{b,project} in not consistent throughout the PoA-DD (please check page 26,27). Please make all the parameters consistent across the PoA-DD	E.6.3.2.1 1	The parameter U _{b,baseline} and U _{b,project} have been revised to be consistent throughout the PoA-DD. PoA-DD has been revised in section E.6.2 page 28 and 30. Second Response:	Please refer to page 32 of PoA-DD – parameters Q _{y,ww,runoff} , B _{o,ww} , MCF _{ww,treatment} are still not consistent in the equation mentioned for PE _{y,runoff}

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		All parameters in equation PE _{y,runoff} in the PoA-DD page 33 has been revised to be consistent with the methodology AMS.III.F.	Response from audit team: PoA-DD has been updated to maintain consistency in the parameters.
Corrective Action Request No.29. Please include parameter for monitoring electricity consumed by the project activity	E.7.1.1	The parameters (EL _y and CEF _{gen,y}) for monitoring electricity consumed by the project activity have been added in PoA-DD section E.7.1 page 38. Second Response: All CPAs are not connected to the grid. CEF _{gen,y} is calcu-	EL _y & CEF _{gen,y} has been added in the monitoring parameter, however please refer to AMS-I.D for computation of CEF _{gen,y}
		lated based on electricity generated by auxiliary diesel in the palm oil mill. Therefore project emission from electricity consumption of formula $PE_{y,power} = (EL_y \times CEF_{gen,y}) + (FC_y \times EF_{fuel})$ has been changed to $PE_{gen,y} = P_{gen,y} \times OT_{gen_comp,y} \times 110\% \times CEF_{gen,y}$. Therefore computation of $CEF_{gen,y}$ in AMS-I.D is no needed.	Response from audit team: Computation of CEF _{gen,y} is still required even if the CPA is not connected to grid. If a CPA has DG sets or other captive power sources, please include the calculation approach of CEF _{gen,y} in section E.6.2 (as specified in page-38 of PoA-DD).
		Third Response: Computation approach of CEF _{gen,y} as specified in section E.6.3 has been included in PoA DD section E.6.2 page 33.	Final response by audit team: Parameter for monitoring electricity consumed by the project activity (OT _{gen,copm,y}) finds a place in the E.7.1. Furthermore calculation approach of CEF _{gen,y} is added in section E.6.2. Therefore the issue can be closed.

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Clarification Request No. 24. Please clarify why parameter MD _{y,reg} has not been added in the monitoring list (section E.7.1), instead its been mentioned in section E.6.3 (parameters reported)	E.7.1.1	The parameter MD _{y,reg} has been moved to the monitoring list in section E.7.1 page 42. Second Response: MD _{y,reg} will need justification of the choice of data to comply with the regulation in the host country. Parameter MD _{y,reg} in the table section E.7.1 has been revised accordingly.	Please refer to CAR 26 Response from audit team: CAR-26 has been appropriately replied.
Corrective Action Request No.30. Please correct the following parameter as per the methodology: Q _{y,ww} to Q _{y,ww,in} ; Q _{ww,runoff} to Q _{y ww runoff} ; COD _{runofwater,y} to COD _{y,ww,runoff} ; CT _{y,w} to CT _y	E.7.1.1	All the parameters have been revised as per methodology in PoA-DD section E.7.1 page 35. Second Response: All parameters in equation PE _{y,runoff} in the PoA-DD page 33 has been revised to be consistent with the methodology AMS.III.F.	Please refer to CAR-28 Response from audit team: CAR-28 has been appropriately replied.
 Corrective Action Request No.31. Please include the following parameter in the monitoring plan: 'Qy, Quantity of waste composted in the year "y in the monitoring plan of PoA-DD composition of waste composted through representative sampling EF_{CO2} - CO2 emission factor from fuel use due to transportation (kgCO2/km) BE_{CH4,SWDS,y} - yearly methane generation potential of the solid waste composted by the project during the years "x" from the beginning of the project 	E.7.1.2	All parameters have been included in the PoA DD. Composition of waste composted is not included in the monitoring plan, as the project will utilize 100% EFB. Second Response: Description of Qy has been revised in PoA-DD section E.7.1. Eligibility criteria have been revised to specify that only EFB & POME shall be composted out of all the palm oil mill residues.	 Qy is included in the monitoring plan, however please correct the description in PoA-DD from 'organic waste' to 'raw waste/manure treated' If 100% input in compost plant is EFB, please update the eligibility criteria of PoA-DD for more transparency to specify that only EFB & POME shall be composted out of all the palm oil mill

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activity (x=1) up to the year "y"		f - fraction of methane captured at the SWDS and flared,		residues.
 MEP_{y,ww} - Methane emission potential in the year "y" of the wastewater. The value of this term is zero if co- 		combusted or used in another manner has been moved to monitoring parameter in section E.7.1.	•	EF _{CO2} has been described in section E.6.3 as ex-ante value.
composting of wastewater is not included in the project.			•	Section E.7.1 is still not updated to include BE _{CH4,SWDS,y}
 F - fraction of methane captured at the SWDS and flared, combusted or 				& MEP _{y,ww}
used in another manner			•	F- fraction of methane captured at the SWDS and flared is still not included in the monitoring plan of the PoA-DD.
			Re	sponse from audit team:
			•	Eligibility criteria of PoA-DD has been updated to include only EFB & POME.
			•	Fraction of methane captured or flared has been added as the monitoring parameter.
Corrective Action Request No.32.	E.7.1.2	Description of measurement methods, recording fre-	Ø	
Please include description of measurement		quency and QA/QC procedures for all the monitored	De	scription of measurement
methods, recording frequency and QA/QC		parameters have been added in PoA-DD section E.7.1		thods, recording frequency
procedures for all the monitored parameters which shall be applied to all CPAs under this		page 35.		d QA/QC procedures is still
PoA. Also please include monitoring of oper-				t update in the PoA-DD for v parameters – EL _v , CEF _{gen.v}
ating hours of composting plant when bio-				AF_w , CT_y , DAF_{comp} , $CT_{y,comp}$
mass plant is out of operation, operating		Second Response:		, у , зотр , у,оотр
hours of machines.		Description of measurement methods, recording frequency and QA/QC procedures in the PoA-DD for few	Re	sponse from audit team:

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		parameters DAF _{comp} , CT _{y,comp} have been updated. Parameter EL _y has been removed from the equation, as the CPA is not connected to the grid. Parameter DAF _w and CT _y are set to zero (N/A) as the CPA is within mill vicinity, the incremental distance for waste transportation is insignificant, and is considered "0" and therefore not applicable. Third Response:	 DAF_{comp}: The updated measurement methods do not transparently indicate the monitoring equipment & recording frequency. For DAFw & CTy: How can it be verified that all the CPAs would have the composting plant at the mill vicinity.
		 DAF_{comp} has been updated to include the monitoring equipment & recording frequency in section E.7.1 page 44. Each CPA will be located in the palm oil mill vicinity and identified through latitude and longitude of the location of the composting plant and palm oil mill. No incremental transportation for solid biomass waste is required and no additional emissions due to incremental transport of solid biomass waste Therefore DAF_w and CT_y are set to zero (N/A). This explanation has been added in PoA-DD section A.4.2 and section E.6.2. 	Final response by audit team: PoA-DD now includes description of measurement methods, recording frequency and QA/QC procedures for all the monitored parameters which shall be applied to all CPAs under this PoA. Monitoring of operating hours of composting plant when biomass plant is out of operation, operating hours of machines is also finally included. Therefore the issue can be closed.
Corrective Action Request No.33. As per the applied methodology, please include in PoA-DD, what kind of measurement and sampling methods would be used to determine the value for COD _{y,ww,untreated} and COD _{y,ww,runoff} for CPAs	E.7.1.3	Kind of measurement and sampling methods would be used to determine the value for COD _{y,ww,untreated} and COD _{y,ww,runoff} have been added in PoA-DD section E.7.1 page 35.	PoA-DD has been updated to include the measurement & sampling plan for COD _{y,ww,untreated} and COD _{y,ww,runoff}
Corrective Action Request No.34.	E.7.1.14	Parameter of energy consumption (FC _y) has been in-	\square

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Please include the parameter to monitor the energy consumption in the project activity (ex: for aeration, turning of compost piles, pre-processing of biomass, drying of final compost product, etc.)		cluded in the monitoring plan.	Quantity of fossil fuel consumed by the project has been in- cluded in the monitoring plan of PoA-DD.
Corrective Action Request No.35. Why the parameter Soil application of the compost in the plantation is repeated twice? Please correct. Please explain how the parameters oxygen level in the compost and temperature in the compost can ensure he requirement of § 33 of AMS.III.F.	E.7.1.21	 Repetition of parameter soil application of compost has been revised in the PoA DD section E.7.1. Will be explained detail in the QA/QC procedures. 	 1. Repetition of 'soil application' parameter has been removed 2. Appropriate quality control program has been included in the monitoring plan of PoA-DD.
Clarification Request No. 25. Please describe appropriately which all parameters would be calibrated and what shall be the monitoring frequency (and recording frequency) for all the parameters in section E.7.1 of PoA-DD.	E.7.2.1	All parameters to be calibrated and monitoring frequency (and recording frequency) have been added in PoA-DD section E.7.1 Second Response: The monitoring frequency details in monitoring plan (E.7.1) for DAF _{comp} , CT _{y,comp} have been added. No calibration is needed for the parameters. Parameter EL _y has been removed from the equation, as the CPA is not connected to the grid. Parameter DAF _w and CT _y are set to zero (N/A) as the CPA is within mill vicinity, the incremental distance for waste transportation is insignificant, and is considered "0" and therefore not applicable.	Please include the calibration & monitoring frequency details in monitoring plan (E.7.1) for EL _y , DAF _w , CT _y , DAF _{comp} , CT _{y,comp} Response from audit team: Please refer to CAR-32. Final response by audit team: Where relevant it is clearly mentioned that the measurement instruments would be calibrated and also monitoring frequency (and recording frequency) is indicated for all the parameters in section E.7.1 of PoA-DD. Therefore the issue

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	 DAF_{comp} has been updated to include the monitoring equipment & recording frequency in section E.7.1 page 44. 	can be closed.
	 Each CPA will be located in the palm oil mill vicinity and identified through latitude and longitude of the location of the composting plant and palm oil mill. No incremental transportation for solid biomass waste is required and no additional emissions due to incremental transport of solid biomass waste Therefore DAF_w and CT_y are set to zero (N/A). 	
	 This explanation has been added in PoA-DD section A.4.2 and section E.6.2. 	
Corrective Action Request No.36. Please indicate the dd/mm/yyyy format to indicate the date of baseline determination	dd/mm/yyyy format has been applied to indicate the date of baseline determination in PoA-DD section E.8	v
		PoA-DD has been revised to incorporate the suggested changes.

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Table 3 Resolution of Corrective Action Requests out of TR

Clarifications and corrective action re-quests	Ref.	Summary of programme activity implementer's	Validation team
by validation team	to	response	Conclusion
	PDD		
Corrective Action Request No.1.	A.4.2.	OK, revised, "no double counting" is included as	\square
Please add the following eligibility criteria also into	2	eligibility criteria as per CDM glossary.	
A.4.2.2:			The requested eligibility
Ensure that no double counting occurs (unique identification)		2. OK, revised, no de-bundling is an eligibility criteria	criteria is added into A.4.2.2 and revised.
2. Criterion for ensuring that no de-bundling		3. OK, revised, criterion iii) has been rephrased and made	
occurs		more specific. An agreement shall be in place authorizing	
3. Agreement between CME and CPA		the CME to included the CPA into the PoA, which implies	
implementer for ceding carbon rights to the		•	
CME;		the ceding of carbon rights.	
4. Within the list already included, at point iii)		4. OK, revised, criterion iii) has been rephrased and made	
when you say "CPA" does it refer to the "CPA		•	
implementer" here; please make it clearer for		more specific.	
the reader.		5 AMO III 5 va 0 marramanta 7 mafara ta tha succeta sittina d	
5. Within the list already included, at point ix)		5. AMS III.F, vs.8, paragraph 7, refers to the waste utilized	
When you indicate "200 km". This could		(i.e. EFB, POME) and states 200 km as maximum distance.	
make an impression as if raw material comes		Hence, the criterion is kept unchanged. The distance is	
from surrounding palm oil mills (with a		made clear in the CPA-DD already stating less then 1km.	
distance of up 200 km) and not just from the			
adjacent palm oil mill; The distance of 200 km			
is rather relevant for transporation of compost			
to the planations; Please further elaborate this			
eligibility criterion;			
Corrective Action Request No.2.	A.4.3	1. The misleading sentence has been revised and further	☑
1. Under the table point ii) When you mention		details are given on the competitiveness of compost vs.	
non-subsidised fertilizer- what is considered		synthetic fertilizer. Referenced person can be contact	1. It has been clarified in the
as non-subsidized fertilizer? Please explain		under:	POA-DD that the non-
here in POA-DD.		PT. Sri Rejeki Fertilizer	subsidised fertilizer
2. Where reference is made to para 73, EB 47		Wisma Presisi Lt.5	means commercially



report- A more recent clarification from the Board (EB60, Annex 26, paragraph 4) could be still added nevertheless additionality will be fully assessed at CPA level according to the reasons mentioned below; Corrective Action Request No.3. Where there is a reference to EB 47 should be updated to EB54, Annex 13.	A.4.4. 1	Taman Aries A1/1 Jakarta 11620 Indonesia Phone. +62-21- 58902030 Fax. +62-21- 58902033 E-mail: info@pamafert.co.id, pamafert@yahoo.com Website: www.pamafert.co.id 2. Ok, wording has been revised accordingly OK, revised with EB54 annex 13	available fertilizer in the general market. 2. The more recent clarification from the Board (EB60, Annex 26, paragraph 4) has been addressed in A.4.3 of POA-DD. All references to EB 47 are updated to EB54, Annex 13.
 Corrective Action Request No.4. A. Referring to the sequence: 1. Point 2- Since for each CPA a separate monitoring report has to be prepared! please revise information; 2. Point 5- Please make clear that those on-site assessments are on sampling basis! B. Referring to "Collection of monitored parameters and elaboration of the monitoring plan"- Since for each CPA a separate monitoring report has to be prepared! please revise information; 	A.4.4. 2	 OK revised, one monitoring report for each CPA OK revised, (only) assessments of the CPAs belonging to the samples. Ok revised, one monitoring report for each CPA 	A.1. Mentioned that for each CPA a separate monitoring report will be prepared. A.2. Revised to say that those on-site assessments are on sampling basis. B. Mentioned that for each CPA a separate monitoring report will be prepared.
Corrective Action Request No.5. 1. Referring to applicability criterion 1, table 3- As this is the applicability criterion in general (and not project related) option 1 (b) should also be	E.2	OK, revised with mention of option 1 (b) OK, revised with mentioning of AMS-III.H	1. Applicability criterion 1, table 3 is revised



mentioned;		3. OK, revised with mention of POME	2.	Applicability criterion 2,
2. Referring to applicability criterion 2, table 3-				table 3 is revised.
Still could be added further. "project activities			3.	Applicability criterion 6,
that recover biogas from wastewater treatment		4. OK, revised with mentioning to check common practice		table 3 (column 2) is also
shall use methodology AMS-III.H".		in the region for each CPA.		revised.
3. Referring to applicability criterion 6, table 3			4.	It is added to inform that
(see column 2)- It should be referred to POME				common practice in the
there to be more specific.		5. OK, wording has been revised.		region will be checked for
4. Referring to statement- "The landfill will be		, , , , , , , , , , , , , , , , , , ,		each CPA.
able to accommodate the solid waste (EFB)			5.	Clarified that the source of
during the whole crediting period"- It should be				EFB will be the adjacent
also checked for each CPA whether it is				mill but the distance will
common practice in the region to dispose of				not be beyond 200 km.
the waste in solid waste disposal site (landfill).				
5. Referring to the mention of 200 km at a				
subsequent criteria point on boundary- Is the				
composting plant not adjacent to the palm oil				
mill (as described in A.4.2)? Not clear why a				
distance of 200 km for transporting the waste				
utilized by the project activity is necessary; this				
distance is rather relevant for transportation of				
compost to the plantations; please elaborate in				
more detail;				
Corrective Action Request No.6.	E.3	OK, revised with "mostly the electricity generated by the	V	
Table 4- Electricity- Referring to the statements		biomass power plant and partly from emergency diesel		
"Use of electricity. Mostly the electricity generated		genset, to run the auxiliary"	Ta	ble 4- Electricity- The two
by the biomass power plant to run the auxiliary			as	pects have been clarified.
equipments e.g. pumps, lighting, shredder/grinder		a) electricity generation was explained in PoA-DD section		
and mixer". Electricity generation by the biomass		B.6.2 (b) Project emissions from electricity and/or fossil		
power plant?		fuel, parameter CEF _{gen,y} which conservative value chosen		
a) Not clear what is meant here, once no details		between 4 options (page 33), and also in Parameter Table		
are mentioned about this electricity generation in		under section E.6.3		
other parts of the PoA-DD; Please elaborate in				



more detail; b) Besides one of the eligibility criteria is that only CPAs with no grid access of the palm oil mill operation process are included, thus not clear how electricity would be stored; Corrective Action Request No.7. Explain further "Prior consideration of the CDM" based on following two points: 1. Under "Prior consideration of the CDM" time to the DOE and UNFCCC. 1. Under "Prior consideration of the CDM" (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in Indonesia) b) eligibility criteria 'only CPAs with no grid access of the palm oil mill operation process are included' was removed, and also explained in the CPA _{gen,y} as point (a) above. I OK, wording has been clarified and list of CPAs complying with the mentioned exception has been sent in time to the DOE and UNFCCC. (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in Indonesia) The start date of the PoA has
CPAs with no grid access of the palm oil mill operation process are included, thus not clear how electricity would be stored; Corrective Action Request No.7. Explain further "Prior consideration of the CDM" based on following two points: 1. Under "Prior consideration of the CDM" (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in and also explained in the CPA _{gen,y} as point (a) above. I OK, wording has been clarified and list of CPAs complying with the mentioned exception has been sent in time to the DOE and UNFCCC. (See document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in POA-DD:
operation process are included, thus not clear how electricity would be stored; Corrective Action Request No.7. Explain further "Prior consideration of the CDM" based on following two points: 1. Under "Prior consideration of the CDM" (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in D "Prior consideration of the CDM" (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in
how electricity would be stored; Corrective Action Request No.7. Explain further "Prior consideration of the CDM" based on following two points: 1. Under "Prior consideration of the CDM" referring to type 1 project and EB report 47 1. OK, wording has been clarified and list of CPAs complying with the mentioned exception has been sent in time to the DOE and UNFCCC. (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in POA-DD:
how electricity would be stored; Corrective Action Request No.7. Explain further "Prior consideration of the CDM" based on following two points: 1. Under "Prior consideration of the CDM" referring to type 1 project and EB report 47 1. OK, wording has been clarified and list of CPAs complying with the mentioned exception has been sent in time to the DOE and UNFCCC. (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in POA-DD:
Explain further "Prior consideration of the CDM" complying with the mentioned exception has been sent in time to the DOE and UNFCCC. 1. Under "Prior consideration of the CDM" (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in PoA-DD: "Prior consideration of the CDM" (clarified as follows in the final POA-DD:
Explain further "Prior consideration of the CDM" complying with the mentioned exception has been sent in time to the DOE and UNFCCC. 1. Under "Prior consideration of the CDM" (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in "Prior consideration of the CDM" has been appropriately clarified as follows in the final POA-DD:
based on following two points: 1. Under "Prior consideration of the CDM" 1. Under "Prior consideration of the CDM
1. Under "Prior consideration of the CDM" (see document: 100127_CPA_list_composting_Indonesia and Mail_CPA lists for hydro_co-composting PoAs in POA-DD:
referring to type 1 project and EB report 47 and Mail_CPA lists for hydro_co-composting PoAs in POA-DD:
paragraph 72- The criteria mentioned there Indonesia) The start date of the PoA has
below seems to be not related to EB47, been defined as 09 th June
paragraph 72; but what EB47, paragraph 72 2. Detailed explanation is given in CR 10 of the PoA-DD 2008, based on the date
indicates is that "the Board decided to grant an submitted to the local auditor together with all underlying when the board of South Pole
exemption to par 5(d) of the Proceudres for documents. It refers to the implementation schedule in Carbon Asset Management
registration of a PoA" to PoAs which have section A.4.2 and hence might have been leading to Ltd. took a decision to
commenced validation prior to 31/12/2009; confusion as we discuss section E.5.1 in this CAR. Post undertake a composting PoA
Therefore such programmes may include submission of the answers to CR 10 of the PoA-DD to the in Indonesia [20]. As this is
CPAs with a starting date between 22/06/2007 local auditor, a confirmation letter in regards of the timeline before 02 nd August 2008 and
and the commencement of validation of the has been sent by EcoSecurities The letter has been sent also before the start of the
PoA, if a list of such specific CPAs is provided together with the contact details of EcoS signing person to GSP (22 nd December 2009)
to validating DOE and UNFCCC secretariat the DOE.
prior to 31/01/2010". (see document: EcoS_date_confirmation) ongoing CDM consideration
2. While PoAs starting date is 9 th June 2008;
what are the actions/evidences to support the following the two approaches
prior CDM consideration (before PoA starting applicable to this POA:
date)? Please submit evidence. Approach-1:
Consists of CPA's that started
prior to 31 st December 2009
and which have additionally
informed the host country
DNA and the UNFCCC
secretariat about the



			commencement of the project
			activity and their intention to
			seek CDM status. This
			follows the early mover
			exemption allowed by report
			of EB 47 paragraph 72.
			Approach-2:
			Consists of CPA's that shall
			start later to POA validation
			start date (22 December
			2009) and as a result do not
			need to demonstrate prior
			consideration of CDM as per
			"Guidelines for the
			Demonstration and
			Assessment of Prior
			Consideration of the CDM" as
			per EB 60 Annex 26.
			However the start date for
			projects under this approach
			shall be clearly defined as per
			CDM Glossary of Terms.
Corrective Action Request No.8.	E.5.2	1. The 50% in the 1 st CPA is the compost/EFB ratio as	
1. Table 5 regarding comment at annual compost		determined by F. Suchhardt and D. Darnoko in	
production- When the 1st CPA assumes 50%		"Composting of EFB with simultaneous evaporation of	Table 5 regarding annual
of EFB processed and does not mention		(POME). Wording has been revised. Calculation approach	compost production value
anything about specification given by the		and references for the CPA are seen in the emission	has been finally updated
manufacturer; why is it stated that the installed		reduction workbook, Input Data sheet, cell L10 and	to refer to realistic value
capacity will be specified by the manufacturer;		following.	of feasibility report.
please clarify;			2. Table 5 regarding
2. Table 5 regarding comment at exchange rate-		2. OK, has been revised accordingly.	comment at exchange
while here it is stated that it would be as per			rate- has been revised for
the date of investment decision, below the		3. The item has been removed together with "other	consistency.

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- same table immediately is said something different, that it would be average exchange rate during the 12 months preceding the date of the investment decision; kindly clarify.
- 3. Table 5 regarding "Other revenues"- why are "other revenues" placed under the item "costs and equipment"? Certainly this is not clear to the reader what other revenues consist of and why is it mentioned here under item "costs and equipment"? kindly clarify.
- 4. Referring to the statement under the table- "As a consequence, the fair value of any project activity assets at the end of the assessment will be considered as zero"- the book value of the asset is zero if fully depreciated, but what is the reasonable expectation of the potential profit on the realization of the assets? (see Guidance 4 of the Guidelines on investment analysis); (please see also for CPA-DD (real case and generic case)
- 5. While it is mentioned that- "A standardized excel worksheet has been developed into which data received from the CPA owner will be entered in a transparent manner, and which will in turn compute the project IRR from the post-tax free cash flow." Page 26 above of POA-DD mentions that a pre-tax project IRR is calculated, thus it should be clarified why the "post tax free cash flow" is mentioned here:
- 6. Where there is reference to EB 16, Annex 31, shall be updated to EB 62 Annex 5 para 12.

operating expenditures" to further clarify.

4. The assets within a co-composting facility consist of truck, shredder, turning machine. The concrete floor can't be considered as asset as it is not movable. According to Indonesian accounting standards assets related to agriculture/plantation are classified as group II and depreciated within 8 years. The underlying assets can be considered as similar and hence all assets within any CPA of the PoA are depreciated within 8 years. Accounting wise the assets are expected to not generate any revenues after 8 years of operation. There are no accounting regulations on the realization of the assets. However, depreciation takes place within 8 years and the min. period of performing the IRR calculation is 10 years. After 8 years, the lifetime of the equipment is accounting wise expected to be over. Hence, the realization of the asset is calculated by the value of the asset material (i.e. mainly steel) and the cost of transportation. Due to remote locations of the palm oil mills, transportation costs are considered as fairly high. equalizing or even exceeding the potential revenues from selling the asset. If small profits or losses would be generated with the realization of the assets, such would affect the overall IRR on a minimal base as it is added in the last year of the IRR analysis period. Wording has been revised in the PoA-DD

(see document (google translate helps for further understanding):

Depreciation_group,

Annex II: Types of Tangible Assets which are Included in the Group II

No. 2 of Annex II: Agriculture, forestry, plantation, fishery; Depreciation_period,

- 3. Table 5 regarding "Other revenues"- the same has been deleted to avoid confusion.
- Referring to the statement under the table- the argument can be accepted for considering the fair value of any project activity assets at the end of the assessment will be considered as zero.
- 5. Pre-tax project IRR has been stated consistently in final POA-DD.
- 6. All references to EB 16, Annex 31, are updated to EB 62 Annex 5 para 12.



Corrective Action Request No.9. 1. Why nothing about BE (POME) is mentioned in E.6.1; please add the same; 2. How project emissions due to electricity consumption are considered when only CPAs with no grid access are included (as per the eligibility criteria)? Clarify for the reader how and when electricity is consumed and accounted for as PE.	E.6.1	 Article 11 – Clause 6 – Group II: 8 Years) 5. OK, as pre-tax IRR is calculated statement in page 26 has been revised. 6. OK, EB 61 Annex 13 para 11 has been replaced with EB 62 Annex 5, para 12. 1. OK, revised with mentioning of POME in E.6.1 parameter MEP_{y,ww} 2. OK, revised (please refer to CAR 6 above) 	 BE (POME) component is mentioned in E.6.1. Eligibility criteria 'only CPAs with no grid access of the palm oil mill operation process has been removed finally
Corrective Action Request No.10. Referring to value indicated for EFco2- why is it 0.0009 while the excel ER calculation file uses 0.0005 and the parameter table indicates the same value (even though different data unit). Clarify.	E.6.2	OK, revised value into 0.00047 (excel file showed rounded up value of 0.0005)	removed. ☑ The value of EFco2 has been made consistent throughout.
Corrective Action Request No.11. 1. Value applied for the parameter EFco2 is 0.00046 while in other parts of the PoA-DD it is considered to be 0.0009. Explain. 2. Description of measurement methods and procedures to be applied for CODy,ww,untreated, states that the samples will be taken monthly and sent for testing at an independent third party laboratory. It should also be explained how "representative"	E.6.3	1. OK, revised value into 0.00047 (excel file showed rounded up value of 0.0005) 2. COD values of the wastewater in a mill won't vary over the year as palm oil production process doesn't change. Hence, one COD test a month by an independent third party laboratory is considered as representative. Further it is in line with the government regulation of effluent COD measurement frequency and has been accepted on by the UNFCCC on now already registered PDDs applying the	 The value of EFco2 has been made consistent throughout. Procedure for ensuring "representative sampling" as per the methodology is mentioned. Procedure for ensuring

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sampling" as per the methodology is ensured;

- Description of measurement methods and procedures to be applied for CODy,ww,runoff, states that the samples will be taken monthly and sent for testing at an independent third party laboratory. It should also be explained how "representative sampling" as per the methodology is ensured;
- 4. Value of data applied for the parameter Pgen,y for purpose of calculating expected emission reductions in section B.5 is indicated to be 0.5. Does this value not vary from CPA to CPA; please make clear and inform for which purpose the value was indicated at PoA level (this comment is also relevant for other parameters where a values are indicated. Eg. OTmachine,skidloader,y, OTmachine,turning,y, DAFcomp, CTy, comp.);
- 5. Parameters temperature and moisture of the compost are missing from the list in E.7.1; According to paragraph 33 of the applied methodology "in case of composting facilities, its operation shall be documented in a quality control program, monitoring the conditions and procedures that ensure the aerobic condition of the waste during the composting process";
- 6. Description of measurement methods and procedures to be applied for Oxygen Level in the compost should also explain that sampling will ensure a maximum margin of error of 10% at a 95% confidence level; please revise.
- 7. According to paragraph 33 of the applied methodology "in case of composting facilities,

same methodology and version. Wording has been provided in the PoA-DD (see document: Ministerial Decree no.51/1999)

- 3. See above.
- 4. OK revised on each Monitoring Parameter table (section E.7.1) for $P_{\text{gen,y}}$, $OT_{\text{machine,skidloader,y}}$, $OT_{\text{machine,turning,y}}$, DAF_{comp} , $CT_{\text{v,comp}}$
- 5. (same for point 7 below) Parameter for monitoring the quality control program, monitoring the conditions and procedures that ensure the aerobic condition of the waste during the composting process, is added in section B.6.1. This quality control program is applicable to the small scale project, which would involve a technical advisor for composting work to ensure aerobic condition, with periodic checks on compost quality and compost turning frequency. The measurement of temperature and moisture is not a specific criteria to be measured under this SSC methodology as it is listed as an example. Only the large scale methodology requires such specifically. Aerobic conditions can be assured with simpler measurements as proposed. Further, it is the co-composting operators key interest to produce high quality compost, which is only generated with constant aerobic conditions, to assure the selling of such.
- 6. OK, revised with sampling with maximum margin of error of 10% at a 95% confidence level

- "representative sampling" as per the methodology is mentioned.
- 4. For the value of data for P_{gen,y}, OT_{machine,skidloader,y}, OT_{machine,turning,y}, DAF_{comp}, CT_{y,comp}, a general case has been indicated.
- Considering the adequate measures taken for ensuring the aerobic aspects of composting, the justification for not including temperature and moisture. However the quality control program has been explicitly stated.



its operation shall be documented in a quality control program, monitoring the conditions and procedures that ensure the aerobic condition of the waste during the composting process"; include this information into E.6.3 of POA-DD.		7. OK revised with additional monitoring parameter Quality Control Program. See as well point 5 above.	 Measurement of Oxygen Level in the compost has been supplemented with adequate sampling to ensure a maximum margin of error of 10% at 95% confidence level. Necessary paragraph 33 information has been added into POA-DD.
Corrective Action Request No.12. Also consider the following important issues throughout the POA-DD: 1. E.7.1., of the PoA-DD (parameter Qy,ww,in) refers to "anaerobic pond" in the project activity – how is it ensured that no methane emissions occur? 2. Several chapters of the PoA-DD refers to "Malaysia" even though Malaysia does not make part of the project boundary. Please revise/clarify:	E.7.1	1. Qy,ww,in is measured to calculate the methane avoidance through the co-composting process by multiplying it with CODy,ww,untreated. CODy,ww,untreated will be taken from the inlet to the composting site. Hence only the actual COD value of the waste water directly entering the composting site will contribute to the baseline emissions. Processes happening before hand won't contribute to baseline emissions and don't have to be addressed as per applied methodology. Qy,ww,in is measured at the pond where POME is pumped to the composting site and therefore will be equal to POME arriving at the composting site. The pond only purpose is to store the POME until used for co-composting covering peak loads. Wording has been clarified in the PoA-DD, CPA-DD and CPA-form to further clarify. 2. Malaysia has been removed in the PoA-DD besides footnote 19 which is used as climatic reference. Climate in Malaysia and Indonesia is considered as similar: Tropical, wet.	Aspects related to "anaerobic pond" and "Malaysia" are revised throughout the POADD.

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Table 4 Resolution of Corrective Action Requests out of TR relevant to CPA Generic form

Clarifications and corrective action requests by validation team	Ref. to PDD	Summary of programme activity implementer's response	Validation team Conclusion
Corrective Action Request No.1. Version of the document should be kept "open" (in the generic CPA-DD) as it depends on the respective CPA.	A.1	OK, revised accordingly	✓ Version has been addressed accordingly.
Corrective Action Request No.2. Reference to EB 36 should be updated.	A.4.6	OK, revised accordingly	Reference to EB 36 has been updated to EB 54.
Corrective Action Request No.3. Referring to the statement- "Therefore, as the proposed CPA is the first CPA included in the proposed Composting and Co-composting Programme of Activities (PoA) in Indonesia, the project is not a de-bundled component."-it is valid only for the 1st CPA!! Please revise accordingly;	A.4.6	Ok, revised accordingly	☑ The statement has been revised to indicate a generic case.
Corrective Action Request No.4. 1. Referring to the table- eligibility criteria are not consistent with the PoA-DD; please revise completely! 2. Also state here below the table "[name of CPA] meets all the applicability requirements of AMS III-F as follows: please mention applicability criteria(as it was done in the 1st CPA, to be consistent)".	B.2	Eligibility criteria have been revised and are now in line with PoA-DD and CPA-DD OK, revised accordingly	 Eligibility criteria in the generic form are made consistent with the PoA-DD finally. Statements below the table are also revised.

Table 4 is applicable to AMS III.F version 8

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Corrective Action Request No.5. Please update reference to EB 41 Annex 46.	B.3	OK, revised accordingly	Ø
Ticase apadic reference to EB 41 / timex 40.			Reference to EB 41 Annex 46 has been updated to EN 49 Annex 22.
Corrective Action Request No.6.	B.3	1. and 2. OK, references are kept empty	\square
Refer to Table 3:		3. The assets within a co-composting facility consist of	
Within comments against annual compost production although it is stated to be as per installed capacity stated by manufacturer- not necessarily as per installed capacity once the 1st CPA assumes 50% of EFB processed; please clarify;		truck, shredder, turning machine. The concrete floor can't be considered as asset as it is not movable. According to Indonesian accounting standards assets related to agriculture/plantation are classified as group II and depreciated within 8 years. The underlying assets can be considered as similar and hence all assets within any CPA of the PoA are depreciated within 8 years. Accounting wise the assets are expected to not generate any revenues after	All the issues are completely addressed for consistency, generic aspects and additional information.
2. Regarding comment at exchange rate- while here it is stated that it would be as per the date of investment decision, below the same table immediately in POA-DD is said something different, that it would be average exchange rate during the 12 months preceding the date of the investment decision; kindly clarify.		8 years of operation. There are no accounting regulations on the realization of the assets. However, depreciation takes place within 8 years and the min. period of performing the IRR calculation is 10 years. After 8 years, the lifetime of the equipment is accounting wise expected to be over. Hence, the realization of the asset is calculated by the value of the asset material (i.e. mainly steel) and the cost of transportation. Due to remote locations of the palm oil mills,	
3. Referring to the statement under the table-3 "As a consequence, the fair value of any project activity assets at the end of the assessment is considered as null"-the book value of the asset is zero if fully		transportation costs are considered as fairly high, equalizing or even exceeding the potential revenues from selling the asset. If small profits or losses would be generated with the realization of the assets, such would affect the overall IRR on a minimal base as it is added in	

Table 4 is applicable to AMS III.F version 8

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depreciated, but what is the reasonable expectation of the potential profit on the realization of the assets? (see Guidance 4 of the Guidelines on investment analysis); (please see also for CPA-DD (and POA-DD). 4. The benchmark section has to be completely updated as the chosen benchmark is finally "local commercial lending rates". Corrective Action Request No.7.	B.4	the last year of the IRR analysis period. Wording has been revised in the CPA-form. (see document (google translate helps for further understanding): Depreciation_group, Annex II: Types of Tangible Assets which are Included in the Group II No. 2 of Annex II: Agriculture, forestry, plantation, fishery; Depreciation_period, Article 11 - Clause 6 - Group II: 8 Years) 4. The default benchmark shall be the "local commercial lending rate". However, the CPA operator shall have the opportunity to apply any other suitable benchmark as well. Generic text has been added.	
In the beginning of B.4 some of the generic			B.4 has been made
text presented in the 1st CPA (real case) is not indicated; please add!			consistent with the 1 st CPA.
 Corrective Action Request No.8. 1. The sequence of parameters within B.5.1 is different in the CPA-DD (generic template) and CPA-DD (real case); please keep it consistent; 2. MCF_{runoff} can be taken out (as already MCF_{ww,treatment} is mentioned). 	B.5.1	 Sequence has been aligned with CPA-DD. MCFrunoff has been removed. 0.9 has bee inserted as default value for the model correction factor and comments as per PoA-DD have been inserted. Revised accordingly. 	All the issues are completely addressed for consistency, generic aspects and additional information.
3. The value applied for model correction		5. Revised accordingly.	

Table 4 is applicable to AMS III.F version 8

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	factor to account for model uncertainties can always be 0.9. and also at comments please mention comment as in PoA-DD	6. EF _{co2} has been added in all documents	
1	as it is the same for all CPA's". The value applied for oxidation factor	7. EF _{co2} units have been revised and further inconsistencies solved.	
4	(reflecting the amount of methane from	Solveu.	
	SWDS that is oxidized in the soil or other material covering the waste)- to be		
	determined at CPA level (0.1 or 0); please correct. Also correct the justification of the		
	choice of data or description of measurement methods and procedures		
	actually applied.		
٥	 The value applied for methane correction factor to be determined at each CPA level 		
	(as per the PoA-DD); Hence please		
	revise specifications of the parameter.		
6	 The parameter CO2 emission factor from diesel use is not indicated neither in PoA- 		
	DD nor in CPA-DD (real case). Please mention it both in PoA-DD and CPA-DD		
	(real case).		
1	 At the parameter EFco2- the CO2 emission factor from fuel use due to 		

transportation is indicated to be 3.18. however the value is the same in the 1st

CPA case, data units are different (kgCO2/kgfuel); The generic CPA-DD



thus please check not only here but throughout the whole template that "generic text/values etc" are the same between template and real case (always). Also calculation does not finally result in 0.0005; please revise; and value 0.0005 has to be corrected (also not consistent with PoA-DD and CPA-DD (real case))			
Corrective Action Request No.9. The formula for BE _{CH4, SWDS,y} is missing from	B.5.2	Formula has been there already. Might be a compatibility problem. The pdf version has been cross-checked.	
B.5.2. has to be mentioned.			The formula is now legible in the final version generic CPA-DD.
 Corrective Action Request No.10. The 1st real CPA mentions item (c) regarding regulations in Indonesia; Why then the generic template does not indicate the same (in a generic way)? The CPA real case mentions the different kind of project activity emissions ("project activity emissions consist of:"); Why not the same is done in the generic template? Under the table for project emissions from transportation, the descriptions of Pgen,y OTgen_comp,y and CEFgen,y includes "project specific information", instead state "generic information"; the same applies for PEgen,y & PEy,power formulae below. 	B.5.2	Regulation is added in the CPA-form Has been added accordingly. Has been revised to comply with generic format	All the issues are completely addressed for consistency, generic aspects and additional information.

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Corrective Action Request No.11. Under section B.5.3 Total number of crediting years" and "Annual average over the crediting period of estimated reductions (tonnes of CO2e)" should be mentioned.	B.5.3	Has been revised accordingly	In section B.5.3 "Total number of crediting years" and "Annual average over the crediting period of estimated reductions (tonnes of CO2e)" are mentioned in final version generic CPA-DD.
Corrective Action Request No.12. Also among the tables under B.6.1 some of the information is "project specific" (instead of generic) information; please check in detail what is really relevant for the generic CPADD.	B.6.1	Whole section has been revised and brought in line with the PoA-DD.	The issues has been addressed for generic aspects.

Table 5 Unresolved Corrective Action and Clarification Requests (in case of denials)

Clarifications and / or corrective action requests by validation team	ld. of CAR/CR	Explanation of Conclusion for Denial
-	-	-



Annex 2: Information Reference List

Ī	Date	Information Reference List- CDM-PoA-DD
	10/08/2011	Programme (PoA) Title: Composting and Co-composting Programme of Activities (PoA) in Indonesia



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Referenc	Document or Type of Information	
е		
No.		
1.	On-site interviews at the project s	ite during 15-02-2010 to 19-02-2010 by the auditing team of TÜV SÜD:
	Verification Team on-site:	
	Bratin Roy	TUV SUD South Asia
	Praveen Pyata	TUV SUD South Asia
	Stephan Hild Praveen Teckchandani	TÜV SÜD Industrie Service GmbH
	Praveen reckchandani	TÜV SÜD Singapore
	Interviewed Persons	
	Paul Butarbutar	PT. Composting Program International (PT.CPI)
	Francois Beaurain	South Pole Carbon Asset Management Ltd.
	Henricus Hutabarat	South Pole Carbon Asset Management Ltd.
	Alin Pratidina	PT. Composting Program International (PT.CPI)
	Pardamean Siahaan	PT Fetty Mina Jaya
2.		mme "Composting and Co-composting Programme of Activities (PoA) in Indonesia" GSP version of the
	PDD – 01; Dated 12-12-2009	
3.	UNFCCC homepage www.unfccc	
4.		cope: 13, "Avoidance of methane emissions through controlled biological treatment of biomass"
5.		ge CO ₂ emissions from fossil fuel combustion
6.		ions avoided from disposal of waste at a solid waste disposal site
7.		and/or leakage emissions from electricity consumption
8.		t al "Protect the environment and make profit from the waste in palm oil industry"
9.		2010, a report by Indonesian Palm Oil Board
		Oil Mills in Indonesia, Darnoco. D (2006)
10.		ife Cycle Assessment of EFB and POME Treatment and Utilisation"
11.	Modalities of Communication	46
12.		PT.CPI happened on 24 th August 2010
13.	Evidence of climatic conditions of	Indonesia: Basiron Yusof, "Palm oil production through sustainable plantations" (2007), European

Date	Information Reference List- CDM-PoA-DD
10/08/201	Programme (PoA) Title: Composting and Co-composting Programme of Activities (PoA) in Indonesia

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Referenc	Document or Type of Information
е	
No.	
	Journal of Lipid Science Technology, 109:289
14.	Regulation of the State Minister of Environment for Environmental Impact Assessment
15.	Decree of the State Minister of Environment for Liquid Waste Standards for Industrial Activities
16.	Government Regulation for Air Pollution Control
17.	Decree of the State Minister of Environment, Guidelines of Requirements, Permit Procedures and Study for Wastewater Disposal into Water or Water Resources
18.	Decree of the State Minister of Environment, Quality Standards for Stationary Source Emission
19.	Email communications on preliminary discussion between EcoSecurities and South Pole about takeover some of EcoSecurities' projects
20.	South Pole board decision to undertake a composting PoA in Indonesia, dated 09/06/2008 (PoA start date)
21.	Document supporting termination of Fetty Mina co-composting projects by EcoSecurities which are under validation with DNV
22.	Agreement including EcoSecurities and Swiss Carbon Assets Ltd. signed on 26 May 2009
23.	Record keeping system for documenting verification status of each CPA
24.	Information on avoided operational and management expenses in the baseline (discussed in E.5.2 of PoA- DD)
25.	Calculation_CPA Composting Indonesia_template
26.	Host Country LOA for PoA dated 26/03/2010
27.	Annex- I LOA for PoA dated 24/06/2010
28.	ERPA between Swiss Carbon Assets Ltd. and Fetty Mina Jaya and its amendment (cooperation agreement between CPA and CME)
29.	Termsheet between Fetty Mina Jaya and South Pole
30.	Holding structure of Swiss carbon assets
31.	PoA composting work shop conducted by CME
32.	Wet weight basis of EFB (used for EF _{composting}) – publication by Astimar Abdul Aziz et al, High Porosity Carbon Powder from Oil Palm Empty Fruit Bunches for Adsorbent Products"
33.	Information on subsidized fertilizer in Indonesia
34.	Composting of Empty Fruit Bunch (EFB) with Simultaneous Evaporation of Oil Mill Waste Water (POME) Frank Schuchardt, D. Darnoko, Purboyo Guritno
35.	"The Composting Process", October 1995, Utah State University, AG-WM 01
36.	Bench mark commercial lending rate
	http://www.bi.go.id/web/en/Statistik/Statistik+Ekonomi+dan+Keuangan+Indonesia/Versi+HTML/Sektor+Moneter/#

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Referenc	Document or Type of Information
е	
No.	
37.	Tripartite Termination Deed by Fetty Mina Jaya (first CPA), EcoSecurities and Swiss Carbon Assets
38.	Financial spreadsheet calculation for a typical CPA
39.	ER calculation for Fetty Mina Jaya- CPA final version
40.	CDM Project Approval Mechanism as per Indonesian CDM National Commission-
	http://pasarkarbon.dnpi.go.id/web/index.php/komnasmpb/cat/2/prosedur-penyetujuan-proyek.html
41.	CDM-SSC-PoA-DD final version 04 dated 09/08/2011
42.	Pertamina National Oil Company- http://www.pertamina.com/index.php?option=com_content&task=view&id=3194&Itemid=667
43.	www.mwesales.com/Gehl-Specs/3640-4240-4640-5240.pdf
44.	http://www.organics-recycling.org.uk/uploads/article1762/Materials%20Handling%20Equipment%20Guide.pdf



Annex 3: Appointment Certificates

CERTIFICATE OF APPOINTMENT



Mr Agarwal, Nikuni, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

		Qualifica	tion appl	icable to		
Standard	CDM	JI	GS	VCS	VER	Other
Date	22.03.11					

			Qualification	on as		
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		22.03.11	22.03.11	22.03.11	22.03.11	

		Other qual	ification		
		Country Ex	kpertise		
Region	1	2	3	4	5
Date	22.03.11				
	F	inancial E	xpertise		
Date	29.03.11				

Qualification in technical areas				
Technical Area				
1.2_Energy generation from renewable energy source	22.03.11			
13.1_Waste handling and disposal	12.04.11			
3.1_Energy demand	27.04.11			

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0001/04.

Date	Signature
27.04.11	Than Klers



Industrie Service

CERTIFICATE OF APPOINTMENT

Mr Pyata, Praveen, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

(4)-V-		Qualifica	ation appl	icable to		
Standard	CDM	JI	GS	vcs	VER	Other
Date	31.01.11					

		(Qualificatio	n as		= = = = = =
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		31.03.11	31.03.11			

		Other quali			
		Country Ex	cpertise		
Region	1	2	3	4	5
Date	31.03.11				
	F	inancial E	xpertise		
Date					

Qualification in technica	al areas
Technical Area	Date
13.1_Waste handling and disposal	31.03.11
13.2_15.2_Animal waste management	31.03.11
15.1_Agriculture	31.03.11

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH.

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0036/00.

deod

CERTIFICATE OF APPOINTMENT



Mr Roy, Bratin, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

		Qualific	ation appl	icable to		
Standard	CDM	JI	GS	vcs	VER	Other
Date	29.03.11					

1 7		(Qualificatio	n as		
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert
Date		29.03.11	29.03.11			

		Other quali			
		Country Ex	cpertise		
Region	1	2	3	4	5
Date	29.03.11				
	F	inancial E	xpertise		
Date	29.03.11				

Qualification in technical areas				
Technical Area	Date			
13.1 Waste handling and disposal	29.03.11			
1.2 Energy generation from renewable energy source	29.03.11			
3.1_Energy demand	29.03.11			
	F			

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0028/00.

Date	Signature
29.03.11	(Hool)

CERTIFICATE OF APPOINTMENT



Ms Wu, Caiyang, fulfills the requirements of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH to participate in audits.

		Qualifica	tion appli	icable to		
Standard	CDM	JI	GS	vcs	VER	Other
Date	23.03.11					

Qualification as							
Status	Trainee	Validator	Verifier	Team Leader	Technical Reviewer	Technical Expert	
Date		23.03.11	23.03.11	23.03.11	23.03.11		

		Other quali	fication				
Country Expertise							
Region	1	2	3	4	5		
Date	23.03.11				23.03.11		
	F	inancial E	xpertise				
Date	23.03.11						

ns Date	
23.03.11	
23.03.11	
23.03.11	
23.03.11	

This appointment is valid for 1 year from its date of signature below and is bound by internal requirements of the Management System of the Certification Body "climate and energy" of TÜV SÜD Industrie Service GmbH.

In case of loss of validity of this certificate as per result of an assessment according internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference No. CMS-Z-0016/01.

Date	Signature				
23.03.11	Thomas Cleira				